HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 16, NO. 9, ABSTRACTS 1225-1379. SEPTEMBER 1976

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CONTENTS

	page
Hospitals in Great Britain	449
Hospitals in other countries	450
Planning, design and construction	450
Determining size of hospital and bed needs	451
Building: tendering, etc.	451
Building costs	452
Hospital design	452
Design of individual general hospitals	452
Design of special departments	453
Design of special hospitals or units	454
Engineering services	454
Electrical installations and equipment	454
Artificial lighting	454
Communication systems	455
Ventilation and air-conditioning	455
Maintenance of buildings and equipment	457
Piping installations	457
Sanitary equipment and fittings	457
Equipment, fittings, furniture	458
Floors and floor coverings	458
Ward furniture, fittings and equipment	458
Beds, cots, etc.	459
Lockers, bed-tables, chairs	460
Equipment generally	460
Staff generally	461
Staff complements	461
Conditions of service	461
Salaries and superannuation	461
Staff management	461
Staff relations	462
Staff training	462
Staff welfare	462
Special classes of staff	463
Administrative and clerical staff	463
Medical staff	464
Nursing staff	465
Other professional and technical staff	468
Organization and administration	469
Economics of hospital management	471
Running costs	473
Bed occupancy, economic use of beds	474
Data processing	474
Libraries	475
Medical records	476
Hospital statistics	476
Public relations	476
Legal aspects of hospital administration	477
Finance and accounting	477
Finance	477
Hospital accounting	478
Supplies and stores	478
Purchasing	478
Economic use of supplies, disposables	479
Quality control	479
Stores	479
Catering, dietetics, kitchens	480
Hospital catering	480
Dietetics in the hospital	480
Food service	480
Laundries and linen service	481
Laundries	481
Hospital linen and textiles	481
Hygiene in the hospital	482
Hospital infections	482
Sources of infection	483
Prevention and control	484
Hygiene in the operating theatre	485
Sterilization	485
Air hygiene	487
Safety measures	487
Accidents, generally	487
Accidents in gas and drug administration	487
The patient	488
Welfare of the patient	488
Voluntary service, voluntary workers	488
Hospital social work	488
The general practitioner and his patients	489
Hospital care	489
Home care, after-care	489
Special departments	490
Operating suites	490
Pharmacy	490
Laboratories	492
Diagnostic X-ray department	493
Departments for special therapy	493
Intensive care units	494
Special hospitals and units	494
Out-patient	494
Casualty and accident	495
Day hospitals	495
Children	495
Geriatrics and long-stay	495
Neurology and neurosurgery	496
Cardiology	496
Urology	497
Surgery	497
Maternity	497
Gynaecology	498
Ophthalmology	498
Psychiatry	499
Author index	v
Addresses of publications	vi

HOSPITAL ABSTRACTS

Vol. 16 September 1976 No. 9

HOSPITALS IN GREAT BRITAIN

1225. BERKELEY, J. S. **The provision of cottage hospital beds.** *Journal of the Royal College of General Practitioners*, Edinburgh, 1976, April, vol. 26, no. 165, pp. 250-254.

The existence of cottage hospital beds seems to be historically determined rather than planned, and there is apparently no official ratio for the provision of such beds. A comparative study carried out in north-east Scotland, based on populations with and without access to cottage hospital beds, suggests that providing 1.5 beds per 1,000 population is a reasonable basis for future discussion and planning.

1226. HUDSON, C. L. **An appraisal of the American and British health-care systems.** *Perspectives in Biology and Medicine*, Chicago, 1975, vol. 18, no. 2, pp. 238-249.

A comparison of the British and American systems of medical care using the conventional guidelines of structure, process and outcomes was applied to the acknowledged major national problems of: (i) price and volume of expenditure; (ii) quality of service; and (iii) distribution of service. Dissimilarities in the size of the countries, doctor's attitudes and homogeneity of populations make it unlikely that the two countries should have identical medical care systems. The good features of the National Health Service which might benefit the American health service if adopted are seen to be overshadowed by weaknesses. These are summarized as: (i) relative expense or extravagance of American medicine is seen as under-financing of the British system; (ii) quality of care in Britain is threatened by the lack of professional stimulus of generalists, inadequate facilities and rationing of medical care by prolonged waiting times; and (iii) distribution of services is a problem in both countries which will not be corrected by administrative controls, but 'pegged to incentives' as is true in America. Administrative change in the NHS in 1974 is evidence of internal dissatisfaction, and demonstrates the need for continual revision of the organization.

1227. POLAK, A. **The district hospital and the medical school: an inaugural lecture delivered at the University, 30th January 1975.** Southampton, University of Southampton, 1975, 16pp. £0.40

This paper discusses the involvement of district general hospitals in the work of medical schools by examining separately the three functions of service, teaching and research to see how the schools can assist the hospitals in these functions and vice versa.

HOSPITALS IN OTHER COUNTRIES

See also Abstract No. 1226

1228. BISCHOFBERGER, P. Die Regionalisierung im Krankenhauswesen. **[Regionalization in the hospital service.]** *Veska*, Aarau, 1976, May, vol. 40, no. 5, pp. 223-225.

Although the responsibility for hospital services in Switzerland lies with the cantons in such a small country some sort of supra-cantonal planning is necessary if the services are to be used efficiently. Since 1947 there has been collaboration between the Basel City and Basel Rural cantons for the pooling of services and recently there have been agreements between the five cantons of north west Switzerland (Basel City, Basel Rural, Aargau, Berne, Solothurn) and with Baden-Württemburg. The special relationship between the two Basel cantons recognizes two groups of patients: those who could be treated in either canton; and those who can be treated only in the Basel University Hospital (which is recognized as the main hospital centre). It is proposed that, while cantons should still retain their hospital responsibilities, a federal hospital commission should be set up which would advise the Federal Social Insurance Office.

1229. HALE, F. A., JACOBS, A. R. and GEPHART, D. **Planning a rural community health center.** *Journal of the Maine Medical Association*, Brunswick, Maine, 1975, Oct., vol. 66, no. 10, pp. 286-291.

The tension between town and region in the United States may become acute when a community faces the prospect of losing its existing hospital and must chose whether to replace it, modify existing service patterns or abolish it. A northern New England rural community was faced with losing its local hospital when it was denied State accreditation and became ineligible for construction funds. Regional planning efforts were in favour of a medical care system which integrated resources from multiple communities to improve services whilst reducing costs. The community rejected the regional planning objectives in favour of a local strategy to meet the immediate need for a hospital. The inability of the regional planners to alter the community's plan to build a hospital and health centre testifies to the pluralist nature of the health planning process in northern New England. The tension between local and regional interests produced a dividend, since it led to the creation of a more flexible, responsive hospital and health care team able to offer a broad array of services. The new hospital and health clinic is probably quite different from when it was first planned. The process by which the hospital evolved exemplifies the political nature of health resource planning in the United States.

PLANNING, DESIGN AND CONSTRUCTION

See also Abstract Nos. 1229, 1362

1230. JONES, D. T. **Public consultation in practice.** *Health and Social Service Journal*, London, 1976, May 22, vol. 86, no. 4491, p. 939.

Clwyd Health Authority has embarked on formal public consultation regarding the pattern of hospital services to be provided in one of its health districts following the

commissioning of a new district general hospital. The new hospital, due to be commissioned in 1978, will serve a population of 170,000. An informal round of consultation was initiated in 1972 regarding the new hospital and in 1975 a discussion paper was circulated for comment. The consultations with staff and the public are outlined. Three lessons to be learnt from the experience are: (i) proposals must be soundly based and thoroughly researched to survive public scrutiny; (ii) the role of the community health council acting as an intermediary between the public and the health service is essential if the former is to have a clear understanding of the complexity of the issues involved in planning; and (iii) health authorities must pay great attention to their relationships with the press, television and radio if they wish their proposals to be accurately presented.

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

See Abstract No. 1225

BUILDING: TENDERING, ETC.

1231. HAWKINS, W. E. **Project planning to the tender stage: a health service view.** *Building Technology and Management*, Ascot, 1975, Nov./Dec., vol. 13, no. 11, pp. 27-28.

The many factors that must be taken into account at the pre-tender planning stage of National Health Service projects are considered. The advantages of such planning are: (i) technical and clerical resources can be planned to produce a balanced work load throughout the year; (ii) realistic targets can be set and the performance measured; (iii) improved co-ordination produces a better service; (iv) improves communication; (v) effects of any change can be appreciated; (vi) queries can be rapidly dealt with; and (vii) a team spirit is created. The Estate Management Code (Estmancode) defines four work categories for the hospital service and the method of planning outlined in this paper is for three of these: work of a periodical nature; irregular maintenance work; and alterations and additions. The sequence of work from pre-tender stage, tender stage and contract period is outlined. The methods used in the pre-tender stage, and the presentation of the programme are described.

1232. LENZ, F. Allgemeine Baupolizeiangelegenheiten für die Krankenanstalten im Raum von Wien. **[General matters of building administration for hospitals in the Vienna area.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1976, May, vol. 17, no. 5, pp. 271-272, 275, 277.

In this paper an officer of the Vienna building authority discusses the procedures involved in securing approval for projected hospital buildings. He uses as an example the new Vienna General Hospital which consists of a podium (210m. by 145m.) above which rise two multi-storey ward blocks with a double corridor design. Among the points discussed, as being of particular importance, are the following: adequate daylighting (or artificial lighting for internal rooms); air-conditioning; provision of stairways; and fire prevention, alarm and fire escape provision.

BUILDING COSTS

1233. GIGLI, S. C. and MONICO, G. Dimensioni e costi di un ospedale. **[Dimensions and costs of a hospital.]** *Tecnica Ospedaliera*, Milan, 1976, May, vol. 6, no. 5, pp. 14-24.

Two architects present statistics relating to a projected 733-bed provincial general hospital in Brescia in an attempt to provide guidelines on costs for other hospital projects in Italy. Total area and volume are broken down into areas allocated to particular departments, wards, laboratories, administrative offices, etc., and the costs of construction, equipment, special installations, and sanitary equipment are analysed. The hospital is expected to cost 24,000 million lire, of which 19,000 million represent construction costs.

HOSPITAL DESIGN

See also Abstract No. 1232

1234. GULLOTTI, A. Modelli di tipologia ospedaliera ed evoluzione nei concetti assistenziali. **[Models of hospital typology and development of concepts of care.]** *Tecnica Ospedaliera*, Milan, 1976, May, vol. 6, no. 5, pp. 25-29.

A short review of the history of the hospital from Roman times is followed by a discussion of the relative advantages of 'vertical' and 'horizontal' designs, with particular reference to South Teesside General Hospital, the Harness system, and Le Corbusier's design for a hospital in Venice.

1235. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY. **Nucleus hospitals.** London, D.H.S.S., 1976, 12pp.

A nucleus hospital is a small intensive use hospital viable in itself as a first phase, but capable of later expansion [see *Hospital Abstracts*, Vol. 16, Abstract 459]. This booklet defines the aims and objectives, outlines the area-district relationships, service planning strategy, design strategy, and design solution, and presents a case study of a nucleus hospital which would eventually have 850 beds.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

1236. POTTIER, H. Hôpital général de Clamart. **[Clamart General Hospital.]** *Veska*, Aarau, 1976, May, vol. 40, no. 5, pp. 237-240.

A very brief description is given of this 500-bed general hospital (architect: Henry Pottier) which is built in reinforced concrete. The technical services (consultation rooms, laboratories, operating theatres, etc.) are deliberately housed in a two-storey building away from the three four-storey buildings which house the wards. The facade of the latter incorporates striking vertical light alloy protrusions between the windows which act as a shield against the sunlight. Six plans and two photographs are included.

1237. HENNE, W. and others. Das neue Kantonspital Schaffhausen. **[The new Schaffhausen Cantonal Hospital.]** *Veska*, Aarau, 1976, June, vol. 40, no. 6, pp. 277-289.

The new buildings for Schaffhausen Cantonal Hospital were completed in April 1976. They include a two-storey treatment block forming the crosspiece of a T with the seven-storey ward block forming its leg. Each ward floor has 24 beds (six two-bed, two single, two four-bed—which could if necessary take six beds, and two isolation rooms) on a single corridor plan. The roof terrace provides a helicopter landing pad. A new 15-storey nurses' home provides 130 single rooms plus six two-room and two four-room apartments. The second stage of the project, not yet completed, provides for the conversion and renovation of the old building. The paper is illustrated with site and floor plans and photographs.

DESIGN OF SPECIAL DEPARTMENTS

See also Abstract No. 1336 (Central sterile supply department)

1238. **Radiology department is a 'maze' with careful and clear design.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 33-34.

Strong Memorial Hospital, Rochester, N.Y., has four concentric zones in the new diagnostic radiology department for separate but related functions. The outer zone includes patient corridors, dressing rooms and waiting areas, the second zone has 21 radiographic and fluoroscopic rooms, the third zone has the technologists' areas and the fourth zone houses viewing facilities, a chemical mixing room, offices and other facilities. Rooms for the more simple procedures are located at the front of the department, whilst those for neuroradial and angiographic procedures are located furthest from the entrance. The width of the corridors for ambulatory patients or out-patients is eight feet wide, the 'non-ambulatory' corridor which must accommodate wheelchairs and stretchers is 12 feet wide. These arrangements ensure maximum privacy for patients, as none of the corridors lead to other hospital areas. The design of the technical area is outlined; patients and technicians communicate by a two-way intercom system since technicians cannot cross into the patients' corridor. The department is designed to provide a pleasant working environment. A plan of the department is included.

1239. MARTINI, P. F. and others. Normativa, progettazione e considerazioni gestionali per un ambulatorio emodialitico ad assistenza limitata. **[Standards, design and administrative considerations for an ambulatory haemodialysis unit with limited care.]** *Ospedale*, Torino, 1976, April, vol. 29, no. 4, pp. 99-106.

Norms for the design and construction of an out-patient dialysis unit are formulated on the basis of the authors' experience in a new unit in the centre of Turin. 'Self-service' and domiciliary dialysis and dialysis with limited care should all be considered as different sectors of the system and some flexibility between these sectors is necessary. Patients for dialysis with limited care should be selected on clinical and psychological grounds. The unit described has eight beds, and 32 patients are treated three times a week for three to five hours. The nurse/patient ratio is 0.6. Two plans and a diagram are included.

DESIGN OF SPECIAL HOSPITALS OR UNITS

1240. Nieuwe Ramaerkliniek psychiatrisch centrum Rosenburg. **[The new Ramaer Clinic, Rosenburg Psychiatric Centre, The Hague.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1976, June 8, vol. 45, no. 1103, pp. 332-334.

The Ramaer Clinic (architects: Posthumes Mijes and Narold, Amsterdam) is the first of three phases for the entire renewal of the 605-bed Rosenburg Psychiatric Centre which caters for all categories of psychiatric patients except children, has a large polyclinic attached, is a training school for psychiatrists and works in co-operation with Leiden University and the social psychiatric services of The Hague. The new clinic comprises: a low-rise building which houses treatment departments, cafeteria, dining-room, day and recreation rooms, chapel; separate treatment building; seven pavilions each with capacity for 11 acute psychiatric patients to stay up to three months; and a nine-storey block which accommodates on the first floor a central admission and observation clinic with 38 beds and on the second to the ninth floors inclusive a polyclinic, medical diagnostic units (electroencephalography, X-ray unit, etc.), offices, dentist, sick bay, and 20 beds for psycho-geriatric patients. Costs of the clinic are Fl.24,820,384 (about £4.5 million), estimated costs of total complex Fl. 100 million (about £18 million). The paper includes one photograph, a site plan and a detailed ground floor plan.

ENGINEERING SERVICES

ELECTRICAL INSTALLATIONS AND EQUIPMENT

1241. TOULAT, J., ROEHRICH, B. and LUCASSE, A. La télévision dans la chambre du malade. **[Television in the patient's room.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 85-87.

Because public hospitals in France compete with private clinics, they too must provide television. The authors review the advantages and disadvantages of this situation. Patients in single and double rooms can rent a television set from an outside contractor or from the hospital; in some cases the hospital owns the sets, in others it rents them. Ideally the patient should be able to switch the set on and off and change the channel from his bed, and the sound should be connected to a speaker in his bedside table.

ARTIFICIAL LIGHTING

1242. SIMON, B. L'éclairage de la chambre du malade. **[Lighting in the patient's room.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 87-90.

The author recommends the provision of 80 to 120 lux for general illumination with an additional 170 to 230 lux for examinations, dressings, etc., 200 lux for a reading light, and five lux for a night light. In children's rooms he recommends a minimum of 15 lux for night time and specifies that the light source should be placed underneath the bed. A warm white light is best for all purposes.

COMMUNICATION SYSTEMS

1243. PAYA, G. and TERRIER, G. Appels malade, signalisation audiovisuelle. **[An audiovisual call system for patients.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 75-82.

This paper reviews the various call systems and describes in detail an audiovisual system in which the patients' calls are received at a central desk and relayed from there to the nearest available nurse. In the patient's room the bellpush and speaker control knob are housed in a special case in the bedside table. Calls from a lavatory produce a special audiovisual signal on the display panel on the central desk. This type of system can save up to 30 per cent of the nurse's time. Four photographs accompany the description.

1244. VALENTI, A. Sistemi di comunicazione interna in campo medico-ospedaliero: gli impianti interfonici. **[Internal communication system in the medico-hospital field: setting up a telephone system.]** *Tecnica Ospedaliera*, Milan, 1976, May, vol. 6, no. 5, pp. 58-61.

This paper discusses the requirements of a system of internal communications, as opposed to and independent of the conventional telephone installation. Communication between different parts of one department and between different departments, without the intervention of the operator, is necessary, facilities for group conversations should be available, and some amplification in noisy areas is required. The paper is illustrated with photographs of telephones with push-button controls which are part of the Ring-Master system installed in the Italian Diagnostic Centre in Rome.

VENTILATION AND AIR-CONDITIONING

1245. AMMAN, L. and COLOMBO, S. Realizzazioni di impianti di condizionamento a portata variabile per l'edilizia ad uso ufficio ed ospedaliera. **[Establishment of an air-conditioning system of variable capacity in buildings for use as offices and hospitals.]** *Condizionamento dell'Aria*, Milan, 1976, Feb., vol. 20, no. 2, pp. 89-95.

This paper presents a technical account of two tailor-made variable capacity air-conditioning systems installed in two large open plan office complexes. It recommends such variable capacity installations as being suitable for hospitals.

1246. BAARLE, A. J. van. Condizionamento d'aria chimico negli ospedali. **[Chemical air-conditioning in the hospital.]** *Tecnica Ospedaliera*, Milan, 1976, May, vol. 6, no. 5, pp. 62-70.

The author describes a conventional chemical dehumidifier, various drying agents used in chemical air-conditioning, the interception of germs in an air-conditioning system, and the Andersen sampling apparatus for monitoring the germicidal effects of the system. He presents results of trials with this sampling apparatus on a Kathabar 110-18-KDCa chemical air-conditioning installation, which showed that 97.5 per cent of all germs were captured and destroyed. The paper includes eight diagrams and four tables.

1247. BRITISH STANDARDS INSTITUTION. **Environmental cleanliness in enclosed spaces.** (BS 5295: 1976) London, B.S.I., 1976, [ii], 18, [ii], 6, [ii], 6pp.

This British Standard relates to requirements applicable to clean rooms, etc., used to provide controlled environments, suitable for the particular conditions required in industry and in surgery and nursing. The three parts of the standard are: specifications; guide to construction and installation; and guide to operational procedures and disciplines.

1248. MONSTADT, H. Installation und Wartung lüftungs-technischer Anlagen in Krankenanstalten. **[Installation and maintenance of air-conditioning equipment in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1976, June, vol. 45, no. 6, pp. 434-436, 441-443.

Air-conditioning installations in hospitals should conform to the latest standards and codes of practice. They should be provided with adequate measuring instruments and alarm signals. Maintenance can only be adequately carried out by the hospital itself if there are properly qualified staff and other facilities. This paper summarizes the basic requirements under the following heads: the purpose of air-conditioning; standards and codes of practice; the construction and mode of operation of air-conditioning plant; the main elements of air-conditioning plant; planning, ordering, and reception; maintenance; and inspection of existing plant.

1249. SOHLBERG, J. von and SÖDERGREN, D. Klimatechnische Tendenzen im schwedischen Krankenhausbau dargestellt am Beispiel eines neuen Krankenhauses. **[Air-conditioning trends in Swedish hospital building using a new hospital as an example.]** *Heizung, Lüftung, Haustechnik*, Stuttgart, 1976, March, vol. 27, no. 3, pp. 77-87.

The air-conditioning plant at the new 1,100-bed hospital at Sundsvall, in central Sweden, is cited as a typical example of Swedish developments in this field. Used air passes through the interspaces of special double- or treble-glazed windows through adjustable openings. The interspaces are connected to the central ventilating plant and the temperature and radiation of the window surface is thus similar to that of other room-enclosing surfaces. Incoming air is electrically heated separately for each room and electronic regulators ensure an even room temperature. Laminar flow throttle valves allow for a relatively marked reduction in pressure in patients' rooms. A total of 45 regenerative heat exchanges in 20 wards recover a high percentage of the enthalpy in the used air: in the conditions prevailing at Sundsvall this is very economic. The paper is illustrated with a number of drawings and graphs.

1250. HEISE, J.-G. Hochaseptische Operationsräume durch Reinraum-Klimaanlagen mit turbulenzarmer Verdrängungsströmung. **[Highly aseptic operating theatre through clean room air-conditioning installation with low turbulence laminar flow.]** *Klima-Kälte-Technik*, Stuttgart, 1975, Sept., vol. 17, no. 9, pp. 189-194.

A number of examples of low turbulence air flow installations in aseptic operating theatres are quoted which show that such systems can reduce the infection rate to less than one per cent. The paper includes a detailed description of the highly aseptic

operating 'cabin', with vertical low turbulence air flow, installed at an orthopaedic hospital near Nuremberg in 1972. This was the first of its kind in Western Germany. The 'cabin' has an area of 2.6m. by 4.9m. The anaesthetist and the patient's head are normally outside the 'cabin' which is bounded by laminated glass to a height of 1.6m. on the head side and 1.2m. on the other sides. Details are given of lighting and air-conditioning plant and the paper is illustrated with photographs, diagrams and charts.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See Abstract No. 1231

PIPING INSTALLATIONS

See Abstract No. 1339

SANITARY EQUIPMENT AND FITTINGS

1251. BOISGELOT, L. and others. L'équipement sanitaire de la chambre du malade dans une unité de soins courante. **[Sanitary equipment in the patient's room.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 91-97; summaries in English, German, Spanish and Italian, p. 97.

This is a careful survey of the sanitary equipment required in a patient's room. In single or double rooms at least a wash-basin and a lavatory (WC) are necessary. The economies achieved by providing only one WC for every two rooms are very small. Each patient should have his own bedpan, and these can be emptied in the WC and washed out with the aid of a hand-spray attached to the wall beside the WC. All the surfaces in the lavatories should be easy to clean, walls should be smooth and painted, and the floors covered with thermoplastic material. Particular attention should be paid to the elimination of noise. The authors describe and illustrate designs for a washbasin, WC pan with push-button flush, mirror and other accessories. They discuss the problems of lighting and electrical safety. Prefabricated units may provide the simplest solution.

1252. NEW ZEALAND. DEPARTMENT OF HEALTH. HOSPITAL DESIGN AND EVALUATION UNIT. **Toilet facilities for long stay geriatric patients. Part 2 of a study of planning requirements for geriatric patients.** (Report No. 4) Wellington, New Zealand Department of Health, Hospital Design and Evaluation Unit, 1975, [118]pp.

This report represents the second stage of a comprehensive study of functional requirements of the various aspects of geriatric care. It aims to present planning recommendations adapted to meet the observed problems associated with the toileting of long-stay patients, typically dependent for most daily living activities on staff and hospital type facilities. Following an introduction the report is in six parts: method of study; general observations; general conclusions; design recommendations; summary; and notes on drawings. Plans, diagrams and illustrative drawings are included.

EQUIPMENT, FITTINGS, FURNITURE

FLOORS AND FLOOR COVERINGS

1253. ROTTER, M. Die Hygiene des Teppichbodens. **[Hygiene of textile floor coverings.]** (Zentralblatt fur Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. 1.Abteilung. Supplementheft 4) Stuttgart, Fischer, 1975, x, 270pp. DM68

This monograph deals exhaustively with the whole question of the use of carpeting in hospitals. There are chapters dealing with the technology of carpets, their mechanical and dynamic qualities, acoustic qualities, thermal effects, relation to fire and fire prevention, electrostatic behaviour, carpet cleaning, the microbiology of carpets, and carpet disinfection. While it is shown that the micro-organism count of carpets is higher than that of smoother floor coverings, most of the micro-organisms harboured are not pathogenic and are therefore of little significance from the point of view of hygiene. The general conclusion is that the advantages of carpeting greatly outweigh any disadvantages: as far as hygiene is concerned carpets have a distinct advantage over other floor coverings. There are 272 references to the literature.

1254. STORY, L. F., editor. **Carpets in hospitals: proceedings of a seminar held at the Russley Hotel, Christchurch, on 18th February, 1976.** Christchurch, Wool Research Organization of New Zealand, 1976, iii, 91pp. $N.Z.10

This seminar was held to provide an opportunity for all the diverse interests involved to exchange views on carpeting in hospitals. Papers were given on: recent work on the hygienic aspects of carpets; bacteriological experiments on carpets at Christchurch Hospital; practical experience of carpeting in psychiatric hospitals; hospital and commercial carpet cleaning; hospital carpet specification; fire safety in hospitals; and textiles and hospital hygiene. Also included are appendices on stain removal and a general carpet specification for hospitals and a bibliography with 52 references to the literature.

WARD FURNITURE, FITTINGS AND EQUIPMENT

1255. GOLAZ, A. L'équipement de la chambre de malade. **[Equipment in the ward.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 108-110.

The furniture in a typical Swiss hospital room is briefly described, with three photographs and two diagrams. An electric motor allows the patient to adjust the height of his bed and the angle of the back-rest. Recent models incorporate a modification which prevents the patient from slipping to the foot of the bed.

1256. LEROY, G. Le mobilier de la chambre d'hospitalisation. **[Furniture in a hospital ward.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 104-107.

A description is given, with nine photographs, of the furniture of a typical Belgian hospital room. Each bed is fitted with a crossbar from which is suspended a trapeze-

shaped handle to help the patient to adjust his position. Orthopaedic beds are fitted with a superstructure and cradle in steel tubing, with holes at intervals of five cm. along the tubing for the attachment of additional apparatus. Each room is supplied with a small refrigerator.

BEDS, COTS, ETC.

1257. BION, G. Le lit d'hôpital. **[The hospital bed.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 43-45.

The modern hospital bed is designed to provide maximum comfort for the patient and ease of use for the staff. Its framework is made of stainless or chromium-plated steel, the head and foot-boards are detachable, all surfaces have rounded corners, the legs are recessed, and at least two of the wheels are fitted with brakes. The base can be raised at the top or bottom by means of an automatic jack. The bedpan holder swings out from under the bed so that the patient can use it without help from the nurse. There are detachable side-rails and, in some cases, a crossbar above the bed. Eight photographs illustrate the various details.

1258. BOROTRA, D. Le lit fonctionnel. **[The functional bed.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 46-49.

It should be possible to raise or lower one or all of the three sections of the base of a functional bed, to adjust the height of the bed and to brake all the wheels simultaneously. Attachments for all types of accessory must be provided. The bed should be easy to manoeuvre, noiseless, shock-absorbent, and strong. Individual departments such as burns units and orthopaedic wards will always have special requirements, but French manufacturers have recently been trying to rationalize the number of types of beds produced. Particular attention is now being paid to the development of safe beds for small children and for geriatric patients. Electrically operated beds are still very expensive. There are five photographs.

1259. CLEMENT, J. M., MORAND, P. and TOULAT, J. La gaine tête de lit. **[Bed-head fitting.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 82-84.

Two diagrams illustrate this concise description of a prefabricated fitting designed to conceal the various pipes and cables attached to, but not embedded in, the wall behind the patient's bed. The casing is usually fitted at a height of 1.70m. from the ground and its three sections contain: (i) the wiring for the telephone, television, call bell, and radio; (ii) the cables for power points and light switches; and (iii) the oxygen, compressed air, and vacuum pipes. A line to connect electronic monitoring equipment to a central computer can also be installed. The fitting should be water- and dust-proof, and easy to clean and to dismantle.

1260. CHAPUIS, R. and others. Les matelas. **[Mattresses.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 50-54.

The first of three short papers describes the interior sprung mattresses which are now in general use in French hospitals. Latex foam and other petroleum products have been abandoned as unsatisfactory. The second and third papers deal with special mattresses

designed for the prevention of pressure sores. The first is made of plastic and is filled with compressed air, and the other, called a modular bed, consists of eight foam blocks each of which contains three layers of foam of different density. There are four diagrams.

LOCKERS, BED TABLES, CHAIRS

1261. BRUNIER, J. and others. La table de chevet. **[The locker.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 55-64.

This series of papers covers: the design of bedside tables/lockers; the 'Galaxie' bedside table; a simple and practical wall-mounted folding table; and an overbed table. There are eleven photographs and six plans.

1262. Le fauteuil du malade. Le fauteuil-lit de l'accompagnant. **[The patient's armchair. A chair-bed for relatives.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 72-74.

Two short papers discuss various designs for hospital chairs, chair-beds, and folding chairs. In some modern hospitals such as that at Beaune where there are only single or double rooms, a relative may share the room of a seriously ill patient; for this he pays 60 French francs a day, or 25 francs for the use of the bed. In most hospitals, however, only a chair-bed is available, and a light, adjustable model is illustrated.

1263. MINAIRE, and others. Le fauteuil roulant. **[The wheelchair.]** *Techniques Hospitalières*, Paris, 1976, May, vol. 31, no. 368, pp. 65-72; summaries in English, German, Spanish and Italian, p. 72.

Generally speaking, paraplegics require a straight-backed folding wheelchair with the large wheels at the back and the small wheels at the front, and a legstrap. Tetraplegics need a wheelchair with a high adjustable back, with the large wheels slightly off-centre towards the back to improve stability, and with knobs on the hand-wheels to offset the patient's prehensile deficit. Severely handicapped tetraplegics may require a battery-operated chair which can be controlled by the patient's hand, head, or mouth. The hemiplegic's wheelchair should have both hand-wheels on the patient's good side. The training of the newly handicapped subject in the management of his chair is described, his psychological problems and social re-integration are discussed, and, finally, the French Social Security procedures for the allocation of wheelchairs are listed.

EQUIPMENT GENERALLY

1264. SJUKVÅRDENS OCH SOCIALVÅRDENS PLANERINGS- OCH RATIONALISERINGSINSTITUT. Utrustningsprojecktering—Kostnadsstyrning. **[Equipment planning—cost control.]** (Spri råd 6.17) Stockholm, Spri, 1975, 30pp.

This advice note recommends a method of cost control for equipment planning, which is largely the same as one in use for construction planning. While it is intended primarily for major new equipment projects, it may also be applied to replacement equipment. Cost control is split into two stages: establishing cost frameworks; and

checking/following up. The first stage includes: programme calculation; basic calculation; and the project budget. The second stage consists of: alternative calculations during detailed planning; current cost considerations; comparisons with established project budget; follow-up calculations for the entire budget; budget balancing; reports on departures from the budget; proposals and decisions about corrective measures; modification of the project budget; and accumulating experience. [This abstract has been prepared from an English summary of the publication.]

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1273, 1277

CONDITIONS OF SERVICE

See Abstract No. 1274

SALARIES AND SUPERANNUATION

See Abstract No. 1272

STAFF MANAGEMENT

See Abstract Nos. 1278, 1308

1265. AINLAY, G. and MORIN, F. F. **Staff evaluation for learning through feedback.** *Hospital Administration in Canada*, Don Mills, Ont., 1976, April, vol. 18, no. 4, pp. 26, 28-31.

Lakeshore Psychiatric Hospital, Toronto, undertook a study to review the present method and the acceptance of the existing staff evaluation system within the hospital. The results of the study revealed that staff evaluation reports were thought to be essential for all staff and that they should be conducted openly. There should be flexibility for all departments in their evaluation procedures, and evaluation should be geared to the needs of the majority of staff. There should also be more active staff participation. As a result a staff evaluation for learning through feedback (SELF) system was developed. The aims of the system are: (i) to provide the member of staff with precise descriptions of his or her job expectations with clearly defined performance standards; (ii) to emphasize present and future behaviour; and (iii) to provide a means of development and direction for the member of staff. The method and principles of SELF are outlined. A staff workshop on the system was established, the resulting feedback indicates that staff have found the SELF method more informative and helpful than the previous system.

STAFF RELATIONS

1266. KREBS, R. L. **Disrespect—a study in hospital relationships.** *Hospital & Health Services Administration*, Chicago, 1976, vol. 21, no. 1, pp. 67-72.

During a study in a 492-bed hospital, person-to-person interaction was observed and rated as: (i) disrespectful—people seeming very unaware of the other's communication; (ii) respectful—noticing with attention; or (iii) not clearly either. Observations made in the summer of 1971 showed six per cent disrespect, 34 per cent respect and 60 per cent non-respect. An anonymous feed back to the different groups of hospital staff resulted in attempts to improve the handling of inter-personal situations, among them the later establishment of a group called Task Force 100 to improve the hospital atmosphere and the inclusion of respect as a major part of the orientation of new hospital staff. The disrespect level remained at 6 per cent until early 1972, but, following the introduction of regular hospital-wide rounds by a doctor, nurse, administrator team, it fell by the summer of 1972 to 2.3 per cent. Observations following the end of the study indicate that the hospital staff have succeeded in becoming much less disrespectful.

STAFF TRAINING

See Abstract Nos. 1271, 1279-1281, 1370, 1371, 1375

STAFF WELFARE

1267. SCHUSTER, W. Arbeitsbedingungen für das Krankenhauspersonal. **[Working conditions for hospital staff.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1976, May, vol. 17, no. 5, pp. 277-282, 285-286.

This survey of requirements to ensure satisfactory working conditions for hospital staff covers both the general and special factors involved. They are dealt with under the following heads: lighting; climatic conditions; ceiling heights; corridors; stairways; doors; transport (including the lifting and moving of goods and equipment); disinfection; electrical installations; radiation protection; working places; safety of machinery; hours of work; welfare of young people; and the welfare of pregnant and nursing women.

1268. SPENCER, J. D., RAASCH, F. O. and TREFNY, F. A. **Halothane abuse in hospital personnel.** *Journal of the American Medical Association*, Chicago, 1976, March 8, vol. 235, no. 10, pp. 1034-1035.

Deaths associated with halothane abuse have occurred in staff of three different hospitals in the United States. Abuse of the drug by inhalation in the fashion of glue sniffing has recently come to notice, and no previous reports have been produced on the subject. The possibility of halothane abuse requires careful control of the drug and measures should be taken to restrict access to the drug in the areas of the operating suites, pharmacies and anaesthesia storerooms.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

1269. LEVINSON, H. **The changing role of the hospital administrator.** *Health Care Management Review*, Germantown, Md., 1976, vol. 1, no. 1, pp. 79-89.

The role of the hospital administrator has altered in recent years since: (i) treatment and administration are recognized as influencing each other; (ii) the leadership of the organization and management of the staff around identification with the leader, not the administration, is the crux of the dominant managerial role; and (iii) there is a movement away from traditional structures of administration. The needs of a role-oriented organization are outlined together with the values and the role of the administrator. These are compared with the needs of a task-oriented organization. For the administrator to move from a role-oriented situation to a task-oriented situation he must: (i) understand the historical background and implications of the change and develop leadership skills; (ii) recognize the similarities in values and objectives held by staff; (iii) link up with each of the working units in the hospital and develop inter-disciplinary teams; (iv) clarify and understand his own role; and (v) consolidate his staff through problem-solving and involvement, so that he is no longer an administrator but a leader.

1270. INSTITUTE OF HEALTH SERVICE ADMINISTRATORS and others. **The role of unit and sector administrators in the health service: the report of a joint working party. (Chairman: Martin Kennedy).** London, Institute of Health Service Administrators, 1976, vi, 23pp. £0.60

The working party was composed of representatives of the Association of Hospital Secretaries, Association of Chief Administrators of Health Authorities, Institute of Health Service Administrators and Scottish Association of Sector and Unit Administrators. It was appointed because the subject of unit administration has been the neglected aspect of the management arrangements for the reorganized National Health Service. The main recommendations of the working party include: (i) the designations of unit and sector administrator warrant further examination; (ii) the need for an administrative co-ordinator at unit level must be recognized; (iii) the important role and considerable responsibilities that both sector and unit administrators undertake should be reflected in adequate levels of remuneration; (iv) administrators aspiring to senior office in general administration should have had practical experience at unit level; (v) the needs of the unit will best be served by a multidisciplinary approach; and (vi) functional budgetary control should be developed in such a way as to bring functional managers into close working relationship with the unit administrator.

1271. HOFMANN, M. Neue Möglichkeiten der Ausbildung für das Verwaltungspersonal in den Kranken- und Wohlfahrtsanstalten. **[New training prospects for administrative staff in hospitals and welfare establishments.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1976, May, vol. 17, no. 5, pp. 263-266, 269, 271.

The author outlines the principles of modern industrial and commercial management and applies these to hospital administration. Two tendencies must be recognized: the

introduction of the principles of scientific management (including systems research, cybernetics, modern accounting methods and electronic data processing) and the development of 'humanitarian' management (more staff participation). It is suggested that hospital administrators should attend courses in these subjects which should extend over four periods of up to four days each and be limited to not more than 24 participants. Once administrators have had this training other groups of hospital staff should become involved in it.

MEDICAL STAFF

1272. **[Hospital medical staff.]** *Acta Hospitalia*, Louvain, 1976, vol. 16, no. 1/2, pp. 5-162.

The eleven papers in this issue are all concerned with medical staffing of hospitals, with particular reference to systems of remuneration. Ten papers are in Flemish, with summaries in French and English, the other is in French with a summary in Flemish and English.

1273. WARENSKI, J. C. **Determination of regional manpower requirements in obstetrics and gynecology.** *Obstetrics and Gynecology*, Hagerstown, Md., 1975, Nov., vol. 46, no. 5, pp. 627-630.

The number of trainees produced by a residency scheme must relate directly to manpower needs in a specialty, not to the service needs of the training institution. In order to avoid geographic maldistribution of specialists it is preferable to determine correct trainee output on a regional basis and combine such information inductively to determine overall national needs. A model for determining the number of residents required to train in obstetrics and gynaecology by 1985 has been constructed by the University of Utah Medical Center, with regard to regional requirements. The ratios are based upon: (i) projection of population growth and manpower requirements; (ii) determination of ratios of specialists to the population in the counties supporting this specialty scheme; (iii) the attrition rates of present doctors; and (iv) the number of regional specialists required on the basis of the proportion of current practitioners who are graduates of the University of Utah scheme, and the proportion of graduates of the scheme who are now practising in the area.

1274. BOLLIGER, R. Der Spitalarzt im Arbeitsverhältnis. **[The working conditions of hospital doctors.]** *Veska*, Aarau, 1975, Dec., vol. 39, no. 12, pp. 617-627; 1976, Jan., vol. 40, no. 1, pp. 3-11; Feb., vol. 40, no. 2, pp. 69-81; March, vol. 40, no. 3, pp. 123-133; April, vol. 40, no. 4, pp. 191-196.

This University of Berne thesis presents a detailed study of the conditions of service of hospital doctors in Switzerland. The thesis is mainly concerned with doctors working in large public hospitals although conditions in private hospitals are dealt with to a limited extent. The legal basis of employment and contracts of service, the different hierarchical systems and conditions of service, and the special conditions relating to private beds in public hospitals are among the subjects covered.

NURSING STAFF

See also Abstract Nos. 1361, 1370, 1371

1275. ASHWORTH, P. and others. **A symposium on the clinical nurse consultant.** *Nursing Mirror*, Sutton, Surrey, 1976, May 13, vol. 142, no. 20, pp. 45-58.

The four papers in this symposium deal with: (i) the role of the clinical nurse consultant; (ii) the clinical nurse consultant in anaesthetics at St. Mary's Hospital, London; (iii) the clinical nurse consultant in infection control; and (iv) the clinical nurse consultant in stoma care, based on experience at St. Bartholomew's Hospital, London.

1276. LUCAS, E., editor. **Nurses and health care: collected papers from the second King's Fund Transatlantic Seminar of Nurses.** London, King Edward's Hospital Fund for London, 1976, 112pp. £5.00

The purpose of this seminar was to enable British, American and Canadian nurses to study the changing role of the nurse and the relationship between nursing education and nursing service. Members were asked to set up study groups in their own settings, selecting topics from the stated objectives for study. Members provided background papers on their special interest for circulation. This volume contains these background papers, revised in the light of discussions, together with the opening and closing addresses. The main topics of the seven sessions were: primary care; technical and scientific advances; clinical specialization; the nurse therapist; management of institutions and services; relationships with other professions; and education.

1277. PLUMMER, J. **Patient classification proves staffing needs.** *Dimensions in Health Service*, Toronto, 1976, May, vol. 53, no. 5, pp. 36-38.

Kingston General Hospital, Ont., needed proof to substantiate claims for more nursing staff; it was thought that one of the answers might be more efficient use of available staff. Medicus Corporation of Chicago established a method of analysing the nursing department's needs. Four main areas were considered: (i) classification of patients by need; (ii) computerized preferential scheduling for staff; (iii) monitoring of the quality of patient care; and (iv) management reporting. The system calls for part-time or full-time floating staff either in or out of the wards according to needs. A move towards the modified working week is developing since 50 per cent of the staff now work 12-hour shifts. Quality assessment is carried out by random sampling with a period of evaluation after a set number of observations have been made during the day. This allows corrective action and a follow-up to be carried out by the day supervisors. The patient classification method is outlined. Staffing guides have been developed for all units giving recommended levels of staffing for professions and non-professionals. The ability to predict the work load based on the patient's condition has greatly improved the staffing of units; the moral of the staff and patient care has improved in all areas. [See also Abstract 1278.]

1278. FINLAYSON, H. **The NUMBRS approach to nursing management.** *Dimensions in Health Service*, Toronto, 1976, May, vol. 53, no. 5, pp. 39-44.

Kingston General Hospital, Ont., established a nursing management, budgeting and reporting system (NUMBRS) with the aid of the management science approach

system of Medicus Corporation of Canada. There are now four major parts in NUMBRS: (i) scheduling; (ii) patient classification; (iii) quality assurance; and (iv) budgeting for the nursing source. A computerized scheduling system was set up offering the maximum flexibility. The features offered are: (i) the hospital can specify five- or six-week scheduling horizons and generate cyclical or flexible patterns simultaneously for different units; (ii) fixed patterns can be integrated with flexible schedules and nurses can specify shift preference, days off and split days; (iii) part-time staff are also covered; (iv) there can be variable coverage both by shift and day of the week; and (v) the hospital can specify variable week-end off ratios and the weighting on coverage for individual patterns. The manual manipulation and testing of the system are outlined together with the method of patient classification. A care index statistic is used to establish the flexibility of the system and determine a normative or empirical approach. Patient care monitoring highlights the deficiencies within the system. The budgeting of salaries is carried out using the work load statistics and management reporting is used for editing the work load data and utilization reports. [See also Abstract 1277.]

1279. HEUSCHNEIDER, R. Fortbildung und Sonderausbildung—die Voraussetzungen für die zeitgemässe Krankenpflege. **[Further education and specialist training—the prerequisites for present day nursing.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1976, May, vol. 17, no. 5, pp. 259-262.

The author discusses post-basic and specialist training of nurses with special reference to the needs and facilities of the Vienna General Hospital. Two types of post-basic training courses are described: those held at a large hospital and open to nurses from other hospitals; and those held within a particular hospital for its own nurses only. Specialist courses include those for theatre work, intensive care, dialysis, nurse tutors, and senior nursing officers. Subjects considered to be of importance for general post-basic training include hygiene, resuscitation, treatment of shock, new developments in medicine and pharmacology, psychology, new nursing techniques, and working conditions.

1280. CLARKE, M. **A degree of nursing.** *Nursing Mirror*, Sutton, Surrey, 1976, May 20, vol. 142, no. 21, pp. 60-61.

There are now far more opportunities to read for a degree whilst training as a nurse, but far less for many older nurses who, although interested in reading for a degree as mature students, often do not know how to do so. Most courses are not geared to their needs. First degrees in nursing lead also to the SRN qualification, as do degree-linked courses, and are not suitable for nurses already holding such qualifications. However the University of Manchester offers a one-year Diploma in Advanced Nursing Studies which can be followed by a one-year MSc in nursing; both courses are suitable for trained nurses. Most nurses will have to choose a non-nursing degree by necessity, and will find it difficult to follow the course on a part-time basis as well as financing themselves. The Department of Health and Social Security (DHSS) offers a small number of places for nurses to be seconded on full salary for a final, full-time year of study. Other grants are also available. Nurses employed in the National Health Service, and studying through the Open University, may be granted study leave for the summer school and examinations by their employers. Each year

there is a small number of research training fellowships for nurses offered by the DHSS but only a few are available to non-graduate nurses. As far as career prospects are concerned there is no means of accelerated promotion for graduates, but given two equally good candidates for a job, the one with the degree might have the edge. A list of useful publications and addresses is included.

1281. WILKINSON, J. A. **Hospital schools of nursing: profits counterpoise costs.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 95-98.

Many hospital schools of nursing in the United States have closed, leaving hospitals increasingly dependent upon less well-trained staff requiring further in-service training. The factor of rising costs has led to hospitals closing their schools of nursing only to find no significant decrease in operating costs. Hospital schools have gradually made great improvements in their educational curricula and now stress both the improved academic background and clinical experience required. The training scheme of St. Luke's Methodist Hospital School of Nursing, Cedar Rapids, Iowa, is outlined. The emphasis on clinical experience is found to be a useful teaching tool spanning the needs of the health care delivery system and the educational systems supported by the professional nursing associations, helping the hospital and the student. Students in their junior and senior years are assigned for one day per week to a clinical area as a nursing assistant under the supervision of the nursing staff. The arrangement provides a wide range of experience for the students, an opportunity to work with a range of patients and a knowledge of how a hospital is run, whilst offering a considerable financial saving to the hospital in staff costs which is later credited to the operating costs of the school.

1282. JOHNSON, C. V. and TINGEY, S. **Matrix organization: blueprint of nursing care organization for the 80s.** *Hospital & Health Services Administration*, Chicago, 1976, vol. 21, no. 1, pp. 27-39.

Along with social and medical technological changes hospitals are faced with patient dissatisfaction with care received and nursing staff complaints about lack of satisfaction in their present task-centred work. The contributory factors are discussed, with an illustrative table, and suggestions made for the development of an adaptive organizational structure for patient care including: (i) elimination of some layers of nursing administration; (ii) fewer categories of auxiliary nursing staff; (iii) less use of rigid rules and procedures; and (iv) greater reliance on the professional judgment of those closest to the problem. A suggested matrix organization co-ordinating hierarchical (vertical) administration and simultaneous lateral (horizontal) inter-departmental patient-centred care is described and illustrated, with particular reference to the job satisfaction for nurses of caring fully for specific groups of patients instead of performing the set of tasks at present specified by their job description for a large number of patients.

1283. GARSIDE, D. **Midwifery in Scandinavia.** *Nursing Times*, London, 1976, May 6, vol. 72, no. 18, pp. 702-704.

In Scandinavia maternity and gynaecology are in one unit, premature baby care and children's nursing being placed together. The standard of care appears to be good,

attention being paid to isolation and separation to prevent cross infection. In Finland a year's midwifery training at the Katilopiston school follows previous nursing experience. In Sweden midwifery training is for one year in certified schools usually attached to university teaching hospitals, the pupils having had up to two years' post-registration experience. There are few trained midwives on the post-natal wards, most of the nurses having sick children's nursing qualifications. Ward instruction is given daily by clinical ward teachers to midwives in training. In both countries pupils are not paid, but may receive a repayable government loan. In Norway midwifery training covers a two-year period. Male midwives are discouraged there unlike Finland and Sweden. The author gives accounts of subjects taught, methods of pain relief used and ante- and post-natal community care in the Scandinavian countries, including the overcoming of problems caused by severe winters and distances between homes and hospitals.

OTHER PROFESSIONAL AND TECHNICAL STAFF

See also Abstract No. 1349

1284. MOSTLER, D. and RANACHER, G. Die Stellung des biomedizinischen Technikers im Krankenhaus. **[The position of biomedical technicians in hospitals.]** *Medizinal-Markt: Acta Medicotechnica*, München, 1976, May, vol. 24, no. 5, pp. 162, 164, 166.

The inter-disciplinary responsibilities of the biomedical technician in Austrian hospitals have increased enormously during the past 20 years. As a result courses in biomedical technology have been established at the Technical University of Graz. The increasing importance of the biomedical technician for the efficient running of hospitals (the purchasing and maintenance of suitable equipment, the supervision of electronic data processing, collaboration in research projects, etc.) has not yet been fully recognized: he should be worthy of a higher status in the hierarchy of hospital management.

1285. HERRICK, J. D. **Motivation of the hospital pharmacist.** *American Journal of Hospital Pharmacy*, Washington, 1976, April, vol. 33, no. 4, pp. 379-382.

Some theories of how management can motivate employees to perform effectively are discussed with special reference to their application to hospital pharmacy practice. Types of reward, such as merit bonuses, promotion, encouragement of feelings of self-fulfilment and self-esteem, and their optimum allocation to encourage greater productivity are considered. Special hospital problems of restricted promotion prospects and shift rota working are discussed. Systems described include those at: (i) University of Wisconsin Hospitals, a large diversified medical centre with a modern pharmacy department oriented towards clinical services and undergraduate education; and (ii) Yale-New Haven Hospital, New Haven, Conn., where merit awards are made in addition to general salary increases. The importance of agreement between management and staff on what constitutes a reward is emphasized, also of the staff having justifiable expectations of appropriate rewards for a sufficient amount of effort expended.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1270, 1282

1286. BROWN, M. **Contract management: latest development in the trend towards regionalization of hospital and health services.** *Hospital & Health Services Administration*, Chicago, 1976, vol. 21, no. 1, pp. 40-59.

The development of multiple unit hospital systems and the new provisions for ensuring some degree of cost containment (Public Law 93-641) have led to greater systems integration between many hospitals. Management contracting, branch hospital development and mergers have all been used to develop regional systems. The growth of multiple hospital systems and their current status is outlined. Contract management is distinguished from shared services (in which both parties jointly control a resource and share the risk of failure) by the administration of an institution reporting directly to the board of trustees or owners of a hospital belonging to another organization. Hospitals likely to enter such an agreement are those with very low occupancy; a financial deficit; rural or inner city site; changing clientele; geographic areas that find it hard to attract skilled staff; new suburbs without a well-defined social group; new towns; up to 200 beds; older hospitals; established, well run organizations wanting more security of total management services; trustees no longer wish to cope with the complexity without a back-up in every area; and doctors do not fully trust the administrators. The advantages and disadvantages of contract management over mergers are outlined. Contract management allows more multiple hospital systems to develop bringing together specialized management skills, economies of scale and greater autonomy for local institutions able to bargain for local interest with large bureaucracies, and can be seen as the latest expression of systems integration.

1287. CHARNS, M. P. **Breaking the tradition barrier: managing integration in health care facilities.** *Health Care Management Review*, Germantown, Md., 1976, vol. 1, no. 1, pp. 55-67.

Integration and co-ordination are becoming increasingly important in the field of health care delivery but many organizations are still influenced by the hierarchical method of control. Benefits for those hospitals that accept matrix organization include improved staff communications, management of internal conflict and new career opportunities. The present inadequacies in health care in the United States reveal poor use of existing resources which could be improved by more successful organization. If there is poor co-ordination many tasks will remain uncompleted. Methods of achieving successful integration are outlined. The matrix organization places great importance upon inter-personal and management skills, and traditional methods should not be allowed to prevent the use of health care teams as co-ordinating agents. The skills in business management lie in balancing the costs and benefits of various alternatives and implementing new systems; such methods should be used in the health care system if it is to become equally businesslike.

1288. SCHULZ, R. and JOHNSON, A. C. **Management of hospitals.** New York, McGraw-Hill, 1976, xii, 299pp. £8.40

This book is designed as both a text and reference book and focuses on current

issues and related research. It is in four parts: (i) introduction—the hospital as a subsystem of the health care system; (ii) the hospital (governance, medical staff, nursing, other health professions and programmes, tasks and functions of the administrator, changing roles of hospital administrators, and managerial functional specialists); (iii) administrative functions—transformation of input to outputs (management for quality, of costs and of conflict); and (iv) environmental influences and constraints (collective bargaining, external influences and constraints, and trends and perspectives).

1289. BEER-GABEL, M. Système hospitalier d'analyse de gestion. **[System for the analysis of hospital management.]** *Gestions Hospitalières*, Mantes, 1976, April, no. 155, pp. 309-312.

The Computer Organization and Methods Division of the French Ministry of Health has devised a hospital system of management analysis (SHAGE) which is now being introduced in some hospitals. The system is designed to achieve automatic retrieval of data of value to management and the reproduction of these data in a form adapted to individual requirements. The interfaces of the hospital's existing information system code the nature of all the data collected—from GRAPH (pay and staff), SIGMA (accounts, patient management), GEMCO (stocks), etc.; the SHAGE editor then retrieves quarterly or monthly tailor-made tables for the head of each department. These tables indicate activities, costs, and effectiveness for each period and compare these with data from a full financial year. Deviations and new trends can thus be speedily identified. The SHAGE editor can also retrieve data for general statistical purposes. SHAGE is operated by the management analysis section in each hospital. The limitations and problems of the system are briefly discussed and a sample table for a department of neurosurgery is included.

1290. LORRANG, F. L'analyse de gestion au centre hospitalier de Metz. **[Management analysis at Metz Hospital Centre.]** *Gestions Hospitalières*, Mantes, 1976, April, no. 155, pp. 337-339.

An account is given of the work of the Management Analysis Section at Metz Hospital Centre. The section produces monthly or quarterly: (i) tables which analyse activity for heads of departments; (ii) management profile studies which analyse balance sheets, investment policy, running costs, and staff; and (iii) sectorial and inter-sectorial analyses.

1291. OTGE, P. L'analyse de gestion au C.H.R. de Montpellier. **[Management analysis at Montpellier Regional Hospital Centre.]** *Gestions Hospitalières*, Mantes, 1976, April, no. 155, pp. 322-324, 327-329, 331-333.

This paper deals mainly with the special tables for heads of departments which are produced by SHAGE (Hospital System for Management Analysis). So far tables for budgetary control, staff, and medical departments have been prepared. The latter are produced quarterly and compute wages, medical and pharmaceutical expenditure, maintenance costs, number of beds, number of admissions, average patient stay, patient days, percentage occupancy, average occupancy, and ratios of B, K, and Z (key-letters for specific medical actions). The object of these tables is to provide each

head of department with a profile of his department in terms of days and patients, to compare actual achievements with forecasts, and to permit the early detection of changes and new trends. The paper includes three of these special tables (running costs, units of activity, and productivity ratios for a urology department), two profiles of the urology department, and 13 graphs which analyse and compare the different elements of expenditure on surgery and expensive specializations, and in central laboratories and radiology departments.

1292. RETTIG, R. Construction d'un système d'information au C.H.R. de Toulouse. **[Construction of an information system for Toulouse Regional Hospital Centre.]** *Gestions Hospitalières*, Mantes, 1976, April, no. 155, pp. 312-317, 319, 321-322.

An account is given of the introduction of SHAGE (Hospital System for Management Analysis) at Toulouse Regional Hospital Centre. The management system is analysed in terms of a pilot module and a technological module and the need for the decentralization of responsibilities and of decision-making is emphasized. There is a detailed description of the preparation of indices of general activity and intensity of care. A simple model for forecasting activity in terms of patient days has been devised. The average length of patient stay and the co-efficient of patient turnover have important financial implications for management. The management analysis section has carried out economic analyses of the radiology department and biochemical laboratory.

1293. FRENAY, E. Problèmes de gestion vus par un directeur d'hôpital. **[Management problems as seen by a hospital administrator.]** *Hôpital Belge*, Bruxelles, 1976, March/April, no. 120, pp. 15-19.

A survey is made of some problems specific to public hospitals in Belgium and those encountered by hospital administrators in every country. Topics discussed include the qualifications required in a chief administrator and the need for increased efficiency in the light of continuing inflation. The author suggests that 'housekeepers' and secretaries, whose salaries are lower, should be employed to relieve nurses of all duties which are not essentially nursing.

ECONOMICS OF HOSPITAL MANAGEMENT

1294. EWELL, C. M. **Evaluation of administrative and organizational effectiveness in hospitals.** *Hospital & Health Services Administration*, Chicago, 1976, vol. 21, no. 1, pp. 9-26.

Some general management evaluation programmes and leadership appraisal theories are discussed with a view to their suitability for hospital use. The weaknesses of the 'medical audit' record-review approach are considered, also the lack of research into ways of measuring the performance of other internal hospital services. The relative success of the multiple hospital reporting of Hospital Administrative Services and Commission for Administrative Services in Hospitals is noted. It is agreed that to achieve an effective hospital evaluation programme an approach is required which recognizes: (i) the internal differences between professional and non-professional

hospital units; (ii) the need for formal and detailed assessment of needs; (iii) the requirement to measure on both intrinsic (the health status of the community) and extrinsic (patient and community attitudes towards the hospital) levels; (iv) the need to use measurable objectives at both the unit level and for the whole organization; and (v) use of community appraisal methods to measure institutional impact on the hospital's service areas and also to establish performance indicators which can be used for both inter- and intra-hospital evaluations. A chart is included showing the overall hospital perspective.

1295. HÄFELI, M. Betriebswirtschaftliche Grundsätze im Spital. **[Principles of economic management in the hospital.]** *Veska*, Aarau, 1976, May, vol. 40, no. 5, pp. 225-228.

The author discusses the principles of industrial management as applied to hospitals. The functioning of a hospital divides into three main areas: management (decision making, planning, organization, control); the means of operation (finance, staffing, installations, materials, information and energy); and performance (diagnosis, treatment, nursing, supply). Each of these is considered separately. To improve the economic management of hospitals the following recommendations are put forward: periodic checking of costs and efficiency; determine objectives and pursue them; observe the inter-relationships of functions; and work as methodically as possible.

1296. TARJÁN, G. Einige Fragen der Steigerung der Wirksamkeit bei den Liegend-Kranken-Institutionen. **[Some questions on increasing efficiency in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1976, June, vol. 45, no. 6, pp.415-422.

In this paper the chief administrator of a Budapest hospital draws attention to the need for more efficient running of hospitals in Hungary in order to ensure that the best possible use is made of hospital facilities. In Hungary 60 per cent of all health service expenditure goes on in-patient and ambulant care of the sick and while more and more people are using hospitals the money to run them is limited. Important tools for assessing efficiency are indexes of performance which can relate actual results to those estimated and provide a basis for comparing hospitals with each other. Outlines of two such indexes are put forward: a cost index which breaks down expenditure by department and service and provides both a cost-per-bed and a cost-per-department figure; and a capacity index which compares theoretical and actual capacity (including the use made of equipment). It is suggested that a pilot scheme on these lines should be initiated.

1297. MARTIN, J.-C., and others. Les services partagés dans le secteur de la santé. **[Shared services in the health sector.]** *Administration Hospitalière et Sociale*, Montreal, 1976, May, Vol. 22, no. 5, pp. 3-20.

This group of five papers deals with the following aspects of shared services, with particular reference to Quebec: (i) the present situation and possible future trends; (ii) group purchasing; (iii) development of services shared between establishments; (iv) regional councils, common services and regionalization; and (v) shared biochemistry laboratory services.

RUNNING COSTS

1298. STEVENSON, B. W. and PATTERSON, D. **Vancouver General Hospital: planning for cost control.** *Dimensions in Health Service*, Toronto, 1976, May, vol. 53, no. 5, pp. 11, 13.

Vancouver General Hospital has developed a system of cost control and monitoring to meet the anticipated cutbacks in health care spending. The aims of the scheme and planning methods are outlined. Some of the objectives which had to be considered were: (i) reviewing the entire organizational structure; (ii) identification of all major cost centres and accounts; (iii) using the previous year's budget as a guide to gross budget allocations; (iv) amending the cost centres as new functions arise; (v) changing the internal reporting budget system from a 12-month system to 13 four-week periods matching the payroll system; and (vi) implementing budget review sessions with staff responsible for cost centres. Administrative support was received for the plan which has been in operation for the past year.

1299. Vorläufiges Leitbild zur Eindämmung der Kosten im Krankenhauswesen. **[A provisional plan for limiting costs in the hospital service.]** *Veska*, Aarau, 1976, May, vol. 40, no. 5, pp. 217-223.

This is the interim report of an expert committee set up in March 1974 by the Council of Zürich Canton to examine and control the development of hospital costs. The committee appointed 14 working parties to look into special aspects of hospital costs. This interim report makes a number of proposals, including the following: more data, based on population statistics, are needed to determine requirements in individual specialties; standardization should be developed; the number of departments should be kept as low as possible; training should be rationalized; more use should be made of trained assistants for routine work; priority should be given in medical research to projects which could reduce costs; more collaboration between hospitals in the organization of emergency services; pharmacies could be run more economically; patients should not derive financial advantages from a stay in hospital; there should be an active State health policy; and hospital information systems should be developed on a uniform basis.

1300. HEINHOLD, M. Kostenanalyse und Kostenauflösung bei Krankenhäusern. **[Cost analysis and breakdown in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1976, June, vol. 45, no. 6, pp. 430-433.

This paper presents an analysis, set out in nine statistical tables, of a questionnaire on costs returned by 30 Bavarian hospitals. These hospitals fall into four groups: (i) six smaller hospitals in rural areas or small towns (61 to 192 beds); (ii) 10 smaller hospitals in large towns (158 to 388 beds); (iii) 11 district hospitals (300 to 824 beds); and (iv) three central hospitals (1,128 to 1,894 beds). The cost per patient day (calculated as the arithmetical mean of medical requirements plus 60 per cent of food costs) and the cost per bed for each type of hospital (in DM) is as follows: (i) 7.60 and 15,400; (ii) 13.40 and 17,700; (iii) 14.60 and 16,400; (iv) 31.60 and 35,700.

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract No. 1343

1301. GEBHARDT, M. Eine überregionale EDV-Lösung für Krankenhäuser. **[A supra-regional electronic data processing solution for hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1976, June, vol. 45, no. 6, pp. 425-429.

Electronic data processing has been used for a study of length of stay of medical, surgical, and ear, nose and throat patients in a Darmstadt hospital. The data recorded for each specialty included the following: number of cases; percentage of total cases; cumulated percentage; average length of stay; age distribution (11 age groups); separate figures for males and females and in total. The results are set out in a number of tables and groups. Surgical patients had an average of 16.8 days (maximum 127 days); medical 19.2 (maximum 115); and ear, nose and throat 7.0 (maximum 11). If the 10 per cent of surgical and medical patients with the longest length of stay were removed to a long-stay facility average length of stay in acute beds could be reduced by 14.9 and 18.8 per cent respectively. For medical and surgical cases the age groups 50 to 70 preponderate: the longer the length of stay the greater the number of elderly patients.

DATA PROCESSING

See also Abstract Nos. 1278, 1289, 1301, 1309, 1351, 1352

1302. BOWIE, J. and BARNETT, G. O. **MUMPS—an economical and efficient time-sharing system for information management.** *Computer Programs in Biomedicine*, Amsterdam, 1976, April, vol. 6, no. 1, pp. 11-22.

The Massachusetts General Hospital Utility Multi Programming System (MUMPS) is an effective tool for the development and support of interactive data management systems. The combination of an interpreted, high-level language and a dynamic hierarchical data base management system, has proven to be an efficient vehicle for the implementation of information systems. Nevertheless it is recognized that MUMPS cannot solve all the problems of information management. This paper gives a brief historical account of MUMPS together with a detailed description of its structure: (i) time sharing executive; (ii) MUMPS language interpreter; (iii) input/output file system; and (iv) global data base management system. Future developments are touched upon including applications in the following medical fields: (i) ambulatory medical records; (ii) computer-aided instruction; (iii) accounting and billing systems; (iv) clinical laboratory automation; (v) pharmacy; (vi) diagnostic radiology; (vii) patient admitting and census; and (viii) utilization review.

1303. SILER, W. and LINDBERG, D. A. B., editors. **Computers in life science research.** (FASEB Monographs Vol. 2) New York & London, Plenum, for Federation of American Societies for Experimental Biology, 1975, viii, 272pp. £10.35

This book presents the proceedings of a conference sponsored by the Federation of American Societies for Experimental Biology, the National Science Foundation and the United States National Institutes of Health. Papers are arranged under the six

sessions with a rapporteur's summary for each; computer applications (two sessions); computer equipment configurations; data base systems; networks and shared facilities; and meeting the costs.

1304. BRANDEJS, J. F. **Health informatics; Canadian experience.** (International Federation for Information Processing Medical Informatics Monograph Series Vol. 2) Amsterdam & Oxford, North-Holland Publishing, 1976, xiv, 239pp. £11.50

This book discusses the complex body of available knowledge on computer-based information systems in health care as they have evolved in the last decade in Canada under the strong influence of developments in the United States. A major part of the study is devoted to: medical records in historical perspective and the structure of the modern medical data base; and design problems of computer-based health information systems. Also included are a bibliography, a glossary, and 17 'exhibits', largely diagrams illustrating concepts, etc. in information systems.

1305. KANSAI INSTITUTE OF INFORMATION SYSTEMS. **The present surroundings and points at issue of the medical information systems in the United States, Europe and Japan: the proceedings of Medis '75, 7-10 October 1975.** Tokyo, Kansai Institute of Information Systems, 1976, [vi], 362pp. $27

The 41 papers given at this symposium cover a wide range of applications of medical information systems in the United States, Europe and Japan.

LIBRARIES

1306. SMITH, J. I. **Circuit librarian serves five hospitals in shared program.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 83-85.

Cleveland Health Sciences Library (CHSL) established a circuit librarian scheme to extend library services to five community hospitals in north-eastern Ohio which could not afford or did not need full-time librarians. Although the circuit scheme required some increases in library expenditure these increases were not large investments for the hospitals. The scheme was to be reviewed on a quarterly basis with the option of discontinuing after one year. The circuit librarian spends one day a week at CHSL, one day at each of the three hospitals and one half-day at the other two hospitals. The scheme is outlined together with the liaison and support services provided by CHSL. The circuit librarian has increased inter-hospital communication by liaising with individual hospital staff and holding inter-hospital committee meetings. The scheme satisfies the needs of the community hospitals for access to health sciences literature and helps initiate peer interaction for information exchange.

1307. ROACH, A. A. and ADDINGTON, W. W. **The effects of an information specialist on patient care and medical education.** *Journal of Medical Education*, Washington, 1975, Feb., vol. 50, no. 2, pp. 176-180.

A medical librarian joined the pulmonary medicine health care team at Cook County Hospital, Chicago, in order to provide a quick response to information needs regarding patient care, graduate medical education, continuing education and research.

The librarian regularly attended rounds and conferences which resulted in the initiation of literature searches in response to clinical problems and educational requirements. The methods of information retrieval and the results of the searches are outlined. The reference service improved patient care and education by providing quick access to the literature, and the team members used the library more. Close co-operation between the specialists and the librarian resulted in an efficient service by pooling special subject and research knowledge.

MEDICAL RECORDS

See also Abstract Nos. 1304, 1305, 1342

1308. BOHAN, D. **Work less and accomplish more.** *Dimensions in Health Service*, Toronto, 1976, May, vol. 53, no. 5, pp. 45-46.

Victoria Public Hospital, Fredericton, N.B., developed a four-day week for staff in the medical record department because of the lack of space. The medical record staff had increased from nine to 14 and transcriptionists from two full-time and two part-time to four full-time and three part-time causing friction in the cramped conditions. The result of the new system is that backlogs have been eliminated, staff work harder, and the department is open from 0700 to 1800 providing 11 hours coverage. The advantages of the system include: every week-end is a long one; rush hour traffic is avoided; there is more time to devote to family affairs and greater relaxation; the office is less crowded and more work is accomplished, the staff learn new jobs as they cover for each other on Mondays and Fridays. The main disadvantages are: tired staff at the end of the day; need to adjust to increased numbers of staff mid-week; and lack of interest on the part of the staff filling in for others. Overtime has now been eliminated and staff have voted overwhelmingly in favour of continuing the system.

1309. TAYSIDE HEALTH BOARD. **The Tayside master patient index.** Dundee, Tayside Health Board, 1976, v, 46pp. £0.50

The Tayside master patient index project began in the early years of the decade with the registration of patients from several hospitals, two general practices, one specialized clinic and the City of Dundee Child Health Service. This project having met its objective of demonstrating the ability of a single identification file to support varied health service activities, a more extensive scheme was planned with the intention of registering all patients receiving health care in Tayside. This report is concerned with the experience gained from the lengthy process of transferring primary care registration records from card to computer files. The report covers the concept of the master patient index; setting up the index; the computer system; the master patient index and primary care registration procedures; the master patient index and hospital records; and the present position and way ahead.

HOSPITAL STATISTICS

See Abstract Nos. 1289, 1290, 1292, 1350

PUBLIC RELATIONS

See Abstract No. 1230

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

1310. SPIEGELHALTER, F. Das Verlust- und Haftungsrisiko der freigemeinnützigen Krankenhäuser unter dem Einfluss von KHG und Bundespflegasatzverordnung. **[Loss and liability risks of hospitals run by charitable organisations under the Hospitals Act of 1972 and the Federal Regulations on Cost per Patient Day.]** *Krankenhaus*, Stuttgart, 1976, June, vol. 68, no. 6, pp. 193-199.

The recent bankruptcy of the Hospital of the Epiphany, Cologne, has provided the occasion for this discussion on the loss risks of charitable hospitals under recent West German hospital legislation. Possible losses are dealt with under three heads: losses from current management; losses in future investments; and losses from total or partial suspension of hospital activities. It is felt that hospitals of this type are discriminated against by the recent legislation and are at a considerable disadvantage. Proposals are put forward for remedying this situation.

FINANCE AND ACCOUNTING

FINANCE

See also Abstract Nos. 1264, 1298, 1354

1311. JOSEPH, H. **On interdepartment pricing of not-for-profit hospitals.** *Quarterly Review of Economics and Business*, Urbana, Ill., 1976, vol. 16, no. 1, pp. 33-44.

An explanation of the interdepartmental pricing policies of non-profit-making hospitals, using models of hospital behaviour, is given. Although a non-profit-making hospital may not plan to make profits on all its activities it may plan to have some departments making profits to subsidize those at a loss. Resource allocation would be affected. Evidence regarding subsidies by departments is submitted, based on the Hospital Economic Survey. The interrelationships of factors affecting departmental pricing are outlined. The four categories of factors are: (i) the demand structure; (ii) preference structure; (iii) cost structure; and (iv) grant structure. Variations in prices and the extent of insurance coverage for each department were shown to be important factors in determining the ratios of patient revenue to direct costs, although these demand factors are not sufficient to determine the department ratios. Three alternative restrictive versions of the general model were outlined: (i) price elasticity of demand and insurance coverage; (ii) profit maximization by doctors; and (iii) differential preferences between quality and quantity. The evidence was consistent with all three hypotheses. More extensive tests are needed. The welfare implications are outlined.

1312. SMITH, A. G. and HIGH, H. M. **The cost of living;—keeping track of rising prices: a hospital price index.** *New Zealand Hospital*, Wellington, 1975/76, Dec./Jan., vol. 27, no. 9, pp. 9-11, 13.

A Hospital Price Index (HPI) has been developed by the New Zealand Department of Health to measure the effect of price movements on the total cost of buying a fixed

'basket' of items representative of hospital consumption. The method of compiling the index is outlined. The index must be kept up to date and new figures produced every quarter. From time to time the 'basket' of items must be revised. The HPI will need frequent revision, e.g. pharmaceutical drugs have a high rate of obsolescence and that section may need revision every three to four years. An investigation into the degree of bias arising from applying the HPI to psychiatric hospitals was carried out by preparing a Psychiatric Hospitals Price Index (PHPI) and comparing it with the basic HPI. A comparison of price indices revealed that psychiatric hospitals would have received inadequate allowances had they only been assessed by the HPI. A comparison between the HPI and the Consumer Price Index (CPI) revealed that the only advantage for using the CPI would be if the HPI cost a prohibitive amount to maintain. The use of the index plays a significant part in allocating finances on a more equitable and rational basis.

1313. EPSTEIN, J. D. and BARRY, D. **Medicare reimbursement controversies and appeals.** *Topics in Health Care Financing*, Germantown, Md., 1976, vol. 2, no. 3, pp. 1-120.

This review of Medicare disputes and legal proceedings includes sections on: (i) the background to Medicare disputes; (ii) a review of the Medicare scheme; (iii) beneficiary entitlement, and health care entity status appeals; (iv) areas of controversy; (v) beneficiary appeals procedures with intermediaries and carriers; (vi) the background to provider reimbursement disputes; (vii) the Blue Cross Association hearings; (viii) intermediary hearing regulations; (ix) judicial review of intermediary hearing decisions; (x) the Provider Reimbursement Review Board; and (xi) Section 1122 Appeals: the Federal Certificate of Need.

HOSPITAL ACCOUNTING

1314. FLESHER, D. L. **Operations auditing in hospitals.** Lexington, Mass. & London, D. C. Heath, 1976, xi, 133pp. £8.00

The operations audit is a thorough examination with the objective of appraising managerial organization, performance and techniques. It is the broadest type of audit and covers all the functions of a business. Following an introduction, this study of the application of operations audit to hospitals has chapters on: operations auditing; hospital accounting and auditing; development of an operations audit model; model in-depth audits; and conclusions. Also included are sample operations audit questionnaires and a bibliography.

SUPPLIES AND STORES

PURCHASING

See Abstract No. 1346

ECONOMIC USE OF SUPPLIES, DISPOSABLES

1315. LAUFMAN, H. and others. **Use of disposable products in surgical practice.** *Archives of Surgery*, Chicago, 1976, Jan., vol. 3, no. 1, pp. 20-26.

Disposable products are an important part of the cost of health devices. Several examples are given of disposable products used by surgeons which demonstrate that, in a 1,000-bed hospital, economy is rarely a reason for converting from re-usables to disposables. It has been estimated that it would require 50 per cent more staff in the central supply department of most large hospitals if they reverted to re-usable syringes and gloves; however the recent sharp rises in the costs of petrochemicals have raised the price of many disposable products almost three-fold in the past two years. Information was gathered from 24 hospitals in New York, New Jersey and Pennsylvania ranging in size from 125 to 5,000 beds, with different methods of laundering, on the use of disposable items. The balance between economy and convenience, efficiency and safety varied between hospitals, as such factors as the availability of the item, storage facilities, disposal methods and wage scales must be taken into consideration. The main reasons for using disposable items are individual preference, convenience and dependability. The problems of storage and disposal are outlined, together with the hazards of using plastic items, woven and non-woven articles and re-use of disposable products.

QUALITY CONTROL

1316. KEATING, E. and SEIDLITZ, P. R. **The role of safety in materials management.** *Hospital Progress*, St. Louis, 1976, April, vol. 57, no. 4, pp. 56-59.

St. Elizabeth's Hospital, Chicago, has established a co-ordinated safety scheme to ensure that all purchased supplies and equipment adhere to local, state and federal safety codes since manufacturers can no longer by relied upon to comply with the codes. The safety scheme has six sections: (i) training must be adequate for all members of staff; (ii) safety surveys should be carried out by a multidisciplinary survey team; (iii) all equipment should be regularly inspected; (iv) safety surveillance should not be limited to surveys and inspections but become a part of the daily routine; (v) accidents should be investigated at all times to determine their cause; and (vi) each product should be carefully evaluated. Product specifications are developed by the supplies manager and the user department using the safety officer's code requirements. The following factors are considered: (i) applicable local, state, and federal codes; (ii) economical order quantity; (iii) limit of issue; (iv) shelf life; and (v) storage requirements. Evaluation and inspection forms are completed for any proposed purchase based on these specifications. When the equipment is delivered it is checked and tested to ensure that the hospital codes, electrical safety codes and the manufacturer's specification are complied with. The hospital, through using this scheme, gets the best product in terms of price, quality and safety.

STORES

1317. TOURGIS, W. J. **Materials management: getting back to basics.** *Hospital Administration in Canada*, Don Mills, Ont., 1976, April, vol. 18, no. 4, pp. 20, 22-24.

Materials management attempts to obtain the most efficient use of resources available at reasonable cost within the physical limitations available. There are seven aspects

needing consideration for the planning and controlling of effective distribution: (i) study the problem; (ii) know the space available; (iii) plan the layout and equipment needs; (iv) develop an effective materials handling method; (v) establish a stock locator system; (vi) establish methods of work; and (vii) develop effective management methods of productivity. The overall result should be to produce an effective, flexible, dependable and manageable system at low cost.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

1318. BRESLIN, J. **Mandate to control food service costs evokes specific responses.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 105-107.

St. Joseph Hospital, Mount Clemens, Mich., has adopted a 'team concept system' to maintain the service of the catering department and cut expenditure wherever possible. The system uses 12 kitchen employees to carry out all the setting, plating, delivery of food and washing-up for the 303-bed hospital. Six units or teams are given responsibility for a particular area of work to be accomplished within a specified time. The team concept has successfully reduced the number of man-hours because there is no overlapping of duties or time-wasting activities. The hospital has also replaced meal delivery equipment by leasing an insulated serving system which allows food to remain at the correct temperature for over an hour. The features of the system include disposable plates, improved portion control and elimination of broken crockery. Data processing equipment has also helped to cut down on labour costs in the catering department by indicating changes in diets of patients. A large capacity freezer has been installed eliminating four small freezers, freeing floor space and increasing cold storage space. Bulk buying can now be carried out. Various smaller cost containment methods are outlined. Waste has been cut down and considerable savings have resulted for the hospital.

DIETETICS IN THE HOSPITAL

1319. PONTANEL, H. G. de and BÉRARD, L. **Alimentation in communities of old people and in hospitals.** In: Food consumption and planning, edited by K.K.P.N. Rao, pp. 339-369. (International Encyclopaedia of Food and Nutrition, Volume 5) Oxford, Pergamon, 1976.

This paper gives guidance on the feeding of people in communities and is in two parts. The first deals with old people and covers nutritional needs, diets, organization of meals and menu planning. The second part deals with food in hospitals and covers: (i) the basis for hospital feeding; (ii) the normal diet; (iii) the main types of special diet; (iv) kitchen premises and equipment; (v) staff; and (vi) menus and foods.

FOOD SERVICE

1320. HEINZELMANN, K. La chaîne froide—Speisenverteilung in Frankreich. **[The cold line—food distribution in France.]** *Veska*, Aarau, 1976, June, vol. 40, no. 6, pp. 312-315.

The Régéthermic or 'cold line' system of food distribution is used in a large number

of French hospitals. Immediately it is cooked, food is put in a special refrigerator in which up to 900 portions can be cooled to +10°C in 10 to 45 minutes. Food is then moved to the cold store where it can be kept at +3°C for a maximum of six days although in practice it is usually stored for only one or two days. When required the food is portioned on a conveyor belt and six workers can deal with 400 trays an hour. Trays go on trolleys to wards where food is regenerated to a temperature of +70°C in 15 minutes and served to patients. The 'cold line' system means that preparation and serving can be entirely separated in time. For a 1,200-bed hospital in Paris capital expenditure on a 'cold line' system was 960,000 francs as compared with 2.3 million francs for a system portioning hot food ('hot line') newly prepared. It is estimated that installation and labour costs for a 240-bed hospital would be about 150,000 francs for the 'cold line' and 125,000 for the 'hot line'.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

1321. Rentex service voor ziekenhuizen en instellingen: verpleeghuis 'De Egmontshof' in Oud Beijerland laat linnenpakket beheren door wasserij twaalf aangesloten wasserijen vangen storingen voor elkaar op. **[Rentex service for hospitals and institutions: 'De Egmontshof' nursing home, Oud Beijerland, allows linen control by the laundry.]** *Voeding- en Huishoudgids*, Amsterdam, 1976, May 31, pp. 250-251, 259.

This 186-bed hospital relies for its laundry on 'Rentex', a service which uses 12 laundries which have mutual emergency arrangements. Still in its infancy, 'Rentex' aims at providing at short notice standard laundry packs for various categories of hospitals. The 'Egmonthof' linen service employs three staff alternately in its transport, storage and cleaning sections and two women on four eight-hour days in the linen room, adjacent to which is a launderette for patients' personal laundry. 'Rentex' calls four times a week. The standard laundry packs are delivered to the linen room in plastic hooded wheeled containers. Every Thursday requirements are checked and pack contents adjusted accordingly. Internal linen transport takes place between 1330 and 1500. Hospital staff separate 'dirty' linen which needs sluicing and 'ordinary' linen into yellow and grey bags respectively carried in wheeled, lidded twin containers. For personal laundry pink plastic bags are used. Full containers are wheeled to a special ground floor waiting area where the laundry is weighed and labelled for invoice purposes. Resident staff have separate laundry packs, their hospital-provided linen being in colour and design distinguishable from that of the patients.

HOSPITAL LINEN AND TEXTILES

See also Abstract Nos. 1260, 1321

1322. KALTHOFF, J. L. Polyester/katoen: toepassing van mengweefsels in ziekenhuizen en instellingen. **[Polyester/cotton: use of mixed textiles in hospitals and institutions.]** *Voeding- en Huishoudgids*, Amsterdam, 1976, May 31, pp. 253, 255, 259.

This paper discusses research into the qualities of polyester/cotton mixtures carried

out at the Enka Glanzstoff Textile Institute, Wuppertal, West Germany. Materials were washed up to 400 times at different temperatures, after which tests were carried out for: (i) wear and tear, which showed mixtures to have more durable qualities than pure cotton; (ii) polyester/cotton ratio, which showed higher loss of cotton than of polyester content, with results given in a table; (iii) loss of whiteness, which was resisted by the built-in whitener of the mixture and use of recommended washing powders; (iv) colour fastness, which was excellent; (v) chlorine, whose normal concentration in washing water did not affect the fibres; (vi) removal of dirt and germs, which from mixtures proved easier than from pure cotton; (vii) transparency, which was initially greater than cotton, but became less so after several washes; and (viii) removal of medicine and chemical stains tested for a range of substances on various fibres at various temperatures, the results of which are given in a table. For persistent stains special individual treatments are mentioned.

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

1323. WENZEL, R. P. and others. **Hospital-acquired infections. I. Surveillance in a university hospital.** *American Journal of Epidemiology*, Baltimore, 1976, March, vol. 103, no. 3, pp. 251-260.

The University of Virginia Hospital, Charlottesville, has established a new system for detecting hospital-acquired infections. The system uses an individual nursing care plan for each patient which is recorded on a Kardex system. Surveillance begins on the ward where a weekly review of the cards is used to select high risk patients (approximately 65 per cent) for a subsequent chart review. A nurse epidemiologist requires 16 to 25 hours per week to perform surveillance and four more to organize line listings of infected patients. The Kardex review was 82 to 94 per cent accurate in detecting hospital infections. The new system was more accurate than a system based on weekly chart reviews of all patients receiving antibiotics and/or of all patients with fever temperature. In addition, it was more accurate than and offered advantages over a system in which surveillance depended primarily on the bacteriology laboratory. Over a 12-month period, 1,154 hospital infections were identified, an annual infection rate of seven per cent. Data from ongoing surveillance are used to record accurate infection rates by service, to define the risk of various hospital procedures and to monitor for common source outbreaks of infection.

1324. ALEGENTE, G. and others. Infezioni urinarie da *Serratia marcescens*: indagine clinco-statistica su soggetti ricoverati nell'ospedale S. Maria della Scala di Siena negli anni 1971, 1972 E 1973. **[Clinico-statistical study of urinary tract infection with *Serratia marcescens*, in Santa Maria della Scala Hospital, Siena, 1971, 1972 and 1973.]** *Annali Sclavo*, Siena, 1975, Nov./Dec., vol. 17, no. 6, pp. 833-841.

Serratia marcescens was isolated from 1.6 per cent of 2,500 samples of urine investigated during 1971 to 1973 at the Santa Maria Hospital, Siena. Sixteen of the 42 patients involved were in the urology or dialysis departments and all of them had been catheterized. The most likely sources of infection were the urine containers and their

collector tubes. Prophylaxis of this type of infection should include more careful use of antibiotic therapy, strict hygiene on the part of medical and paramedical staff, and segregation of infected patients.

1325. LINDSEY, J. O. and others. **An outbreak of nosocomial *Proteus rettgeri* urinary tract infection.** *American Journal of Epidemiology*, Baltimore, 1976, March, vol. 103, no. 3, pp. 261-269.

Urinary tract infections were discovered in 11 patients on a single physical rehabilitation ward in the Jewish Hospital of St. Louis (Mo.). *Proteus rettgeri* isolates were indole-negative and resistant *in vitro* to all antibiotics tested. Attempts made to define a common source of infection finally suggested that the most likely method of spreading infection was via the hands of nursing staff. Infected patients were more likely to have indwelling urinary tract catheters than the control patients with whom they were matched. Information collected from a study suggested that placing catheterized patients in rooms that do not contain other catheterized patients may be an effective control measure in preventing nosocomial urinary tract infection.

1326. RICE, P. A., CRAVEN, P. C. and WELLS, J. G. ***Salmonella heidelberg* enteritis and bacteremia: an epidemic on two pediatric wards.** *American Journal of Medicine*, New York, 1976, April, vol. 60, no. 4, pp. 509-516.

Symptomatic infection developed in 55 children after admission to the paediatric wards of two hospitals in San Juan, Puerto Rico, in many cases with diarrhoea of unidentified cause. A patient introduced the infection, which was transmitted from person to person within and between the hospitals for nearly four months. Salmonella bacteraemia was recorded in 25 patients, five had clinically unsuspected and untreated bacteraemia without complications during the $4\frac{1}{2}$-month follow-up period, and 30 had 'standard' *Salmonella heidelberg* symptomatic infection. Eight children died, four being bacteraemic. Neonates with salmonellosis were found to have a higher rate of bacteraemia than the other children. Cohort nursing and isolation of patients with positive cultures halted the epidemic. It is concluded that non-typhoid salmonella bacteraemia, sometimes clinically unsuspected and self-limited, should be recognized as a frequent accompaniment of salmonella enteritis in young hospitalized children.

SOURCES OF INFECTION

See also Abstract No. 1253

1327. NOBLE, W. C. **Dispersal of skin microorganisms.** *British Journal of Dermatology*, London, 1975, Oct., vol. 93, no. 4, pp. 477-485.

This literature review considers studies on the dispersal of skin micro-organisms under three headings: (i) investigation of the skin surface and the process of desquamation; (ii) hospital or industry-based studies on the hazards of dispersal; and (iii) the importance of reducing and controlling such dispersal. The need for greater knowledge and understanding of dispersal together with more research is outlined. A list of 57 references to the literature is included.

1328. MAKI, D. G. and others. **Nationwide epidemic of septicemia caused by contaminated intravenous products. 1. Epidemiologic and clinical features.** *American Journal of Medicine*, New York, 1976, April, vol. 60, no. 4, pp. 471-485.

Between mid-1970 and 1 April 1971 *Enterobacter cloacae* or *E. agglomerans* septicaemia developed in 378 patients in 25 American hospitals while they were receiving intravenous products manufactured by one company. Each of the hospitals noticed a marked increase in this type of septicaemia during the period. The infections resulted in the death of 40 patients. The results of epidemiological and clinical research are described in detail and given in seven tables and five charts. The organisms were isolated from new elastomer liners in the screw-caps used for closure of specific infusion product containers, 39.9 per cent of 1,007 caps containing micro-organisms, 8.1 per cent *E. cloacae* or *E. agglomerans*. The organisms were isolated from 0.6 per cent of cultures of fluid from stock supplies of bottles with elastomer-lined closures and recovered from intravenous fluid being administered to septicaemia patients, organisms being found to be easily transferrable from the closures to the fluid by shaking the bottle. The epidemic ceased following discontinuance of the use of the infusion products in individual hospitals and a nationwide product re-call. The value of surveillance of hospital infections, the need for adequate preventive measures and the danger of using conventional screw-cap closures with products that must remain sterile is emphasized.

1329. RAPKIN, R. H. ***Pseudomonas cepacia* in an intensive care nursery.** *Pediatrics*, Evanston, Ill., 1976, Feb., vol. 57, no. 2, pp. 239-243.

An outbreak of *Pseudomonas cepacia* infection in an intensive care nursery of the Children's Hospital of Newark and New Jersey Medical School, Newark, N.J., was associated with contaminated, distilled water. Results from the epidemiological investigation revealed that contamination was due to a leak in the distiller, contaminating the effluent. The distilled water was not sterilized, neither were the bottles used to distribute it. The epidemic was stopped by obtaining all water for patient care areas from commercial sources and using the distiller for non-patient areas. Both professional and non-professional staff failed to recognize the misuse of unsterile, distilled water until the epidemic broke out, although attention was paid to the proper disinfection of equipment, taking it for granted that the water used in the equipment was sterile.

PREVENTION AND CONTROL

See also Abstract No. 1323

1330. BAULIG, H.-G. and EDELMEYER, H. Möglichkeiten und Grenzen der zentralen und dezentralen Desinfektionsmittelversorgung im Krankenhaus. **[Possibilities and limitations of centralized and decentralized disinfectant supplies in the hospital.]** *Krankenhaus*, Stuttgart, 1976, June, vol. 68, no. 6, pp. 213-218.

Adequate disinfection is an essential factor in the control of hospital infections and extreme accuracy in making up disinfectant solutions of the right strength is most important. The various mechanical methods of making up such solutions are described and illustrated with photographs and diagrams. For 'decentralized' use injector instruments and pressure mixers are the methods of choice but a central system,

whereby disinfectants are accurately mixed with water and piped throughout the hospital, has many advantages. Two important principles are enunciated: disinfecting plants should be operated by specially trained staff; and the functioning of such plants should be regularly inspected. Guidelines on dosage apparatus for disinfectants are in active preparation by the [West German] Federal Health Office.

1331. MELICONI, F. and BOCCADORO, S. Disinfezione dell'aria con speciali lampade germicide a raggi ultravioletti. **[Disinfection of the air with an ultraviolet germicidal lamp.]** *Ospedale*, Torino, 1976, May, vol. 29, no. 5, pp. 142-148.

A new type of germicidal ultraviolet lamp is described. When it was used in a premature baby unit, the number of bacteria which could be grown on petri dishes after exposure for sixty minutes was slightly but consistently less than when an ordinary ultraviolet lamp was used.

1332. STEINHAGEN, R. H. Flächendesinfektion im Krankenhaus. **[Surface disinfection in the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1976, June, vol. 45, no. 6, pp. 446, 449-451.

Surface disinfection in hospitals is best carried out by the 'two-pail', damp-mopping method. One pail (distinctively coloured) contains the accurately measured disinfectant solution, the other has clear water for frequent rinsing of the mop. This method is also cheaper: it has been calculated that the 'one-pail' method costs DM1.33 per 100 sq. m. as compared with DM0.5 for the 'two-pail' method. The combination of detergents with disinfectants is not recommended. Thorough cleaning should be carried out at specified intervals with daily disinfection. A directive of the [German] Federal Health Offices distinguishes four areas in hospitals: (i) areas with small infection risk (offices, dining rooms, staircases, etc.), which need only cleaning; (ii) areas with medium infection risk (out-patient, physiotherapy and X-ray departments); (iii) areas of higher infection risk (laboratories, milk kitchens, etc.); and (iv) areas which need special protection (operating suites, intensive care units, isolation units, etc.). The three latter all need cleaning and surface disinfection. There are opposing views on the economic advantages of contract disinfecting.

HYGIENE IN THE OPERATING THEATRE

1333. **Symposium on surgical infections and antibiotics.** *Surgical Clinics of North America*, Philadelphia, 1975, Dec., vol. 55, no. 6, pp. 1259-1444.

The 26 papers in this symposium discuss the changing nature of surgical infections, the infecting bacteria, and the antibiotics used to control them. A variety of points of view are represented.

STERILIZATION

1334. DUCEL, G. Gase als Sterilisationsmedien. **[Gases as a sterilization medium.]** *Veska*, Aarau, 1976, June, vol. 40, no. 6, pp. 291-294.

For the sterilization of equipment which is neither heat resistant nor resistant to moisture the use of gases is necessary. For medical equipment the following three gases are possible: betapropiolacton; ethylene oxide; and formaldehyde. In assessing these

substances the following factors have to be considered: antibacterial action; effect on the chemical and physical stability of the equipment; packaging; costs; and effect on the health of the staff. The conclusion is that ethylene oxide is most suitable for hospital use although formaldehyde is cheaper and this might be a decisive factor in the case of certain equipment intended to be disposable but which could be resterilized for reasons of economy.

1335. KOWALSKI, J. and PECK, P. **Standards needed for sterilization monitoring.** *Hospital Progress*, St. Louis, 1976, April, vol. 57, no. 4, pp. 52-54.

St. Mary's Hospital, Milwaukee Wis., undertook a study to determine what sterilization procedures were most effective in preventing hospital infection and the minimum quality assurance standards required. No standards had been established, only general recommendations, consequently a sterilization control scheme was set up by the hospital. Seven areas of concern were examined: staff; equipment; packaging materials; steam and ethylene gas monitors; recall (lot numbering); environmental controls; and costs. A training scheme was established combining the in-service methods of training prepared by manufacturers and the hospital's weekly training which included readings, discussions and practical application of reprocessing techniques. Adequate supervision is important during training, and this is carried out according to a centralized materials management concept, by which all staff are subordinate to a material processing supervisor. Each of the categories of concern is analysed and the procedures outlined. The cost of implementing the scheme is $300 per month, not including staff costs. The hospital believes the costs are justified since the safety of the patient is guaranteed, and the system will support the defence of the hospital in the event of legal proceedings. All hospitals should establish standards of sterilization and be subject to quality assurance standards established and enforced by the Food and Drug Administration or the Environmental Protection Agency.

1336. RYAN, M. J. **The new central supply department at Lutheran Hospital & Medical Centre, Wheat Ridge, Colorado, U.S.A.** *ASSA Journal*, Matlock, 1976, May, vol. 4, no. 4, pp. 12-15.

This central sterile supply department has been redesigned following expansion of the hospital. The physical layout of the area has been improved, and soiled goods are now received in the soiled receiving area via an automated distribution system. The procedures for washing items and the machinery used are outlined. Following decontamination all reprocessable items are prepared and packed in sets for further processing by steam sterilization. The entire sterilization process is automatically controlled to eliminate errors. The department employs 41 people on three different shifts and is open for a 24-hour service. A plan of the department is included.

1337. FOSTER, M. **Distribution system used at Charing Cross Hospital.** *ASSA Journal*, Matlock, 1976, May, vol. 4, no. 4, pp. 10-11.

The central sterile supply department (CSSD) at Charing Cross Hospital has used a topping-up system for routine distribution purposes to wards and departments. Exceptions to this are the operating suites and a small number of specialized units where requirements are made up and delivered against a requisition. The topping-up system is used for 76 separate delivery points by five distribution assistants. The CSSD tops-up any pack in the ward's utility room that is commonly used on that ward. The

shelves are checked daily. The assistants use dictaphones to take the place of written requisition slips, and now visit the wards and dictate requirements onto the tape. On return to the CSSD they replay the tape item by item, select the required items and place them into large plastic bags labelled with the name of the ward. The assistants then deliver and place the selected items on the utility room shelves. All ward shelves are labelled to a standard format that follows the layout of packs in the CSSD, ensuring that the tape and packs will be in the same sequence. Examples of the work schedules for distribution assistants are included.

AIR HYGIENE

See Abstract No. 1247

SAFETY MEASURES

1338. TIMMERMANS, I. Academisch Ziekenhuis Leiden. (II). **[Leiden University Hospital. II.]** *Instelling-Management*, Den Haag, 1976, May 26, no. 5, pp. 9-11, 13, 15, 17.

This paper discusses the fire and safety service of the 869-bed hospital, an old structure comprising 23 separate buildings. A total of 303 people are involved in: safety patrol (30), fire brigade (35), rescue team (14), communications (7), transport and first aid (15), building safety (34), other tasks (168), aided by seven fire service vehicles, five ambulances and two equipment vans. The hospital has its own water supply and emergency power plant. The safety service relies on three lines of assistance: (i) internal—each building has at least one buildings safety officer with staff, all volunteers drawn from hospital employees, who are responsible for evacuation, emergency treatment, fire drills, training, emergency technical provisions; (ii) internal—concerned with transport, first aid, rescue operations, communication and technical service; and (iii) external—the municipal fire brigade which takes charge, and police, civil defence and Red Cross. Details are given of manning, uniforms, equipment, instructions, alarm system, materials, safety patrol methods, transport, and first aid, including a diagram of organization. Comprehensive fire drills are carried out regularly. The evacuation plan is based on three main escape routes and worked out in detail with communication code, use of lifts, emergency exits, etc. Other services, such as gardening, refuse collection, post, are briefly mentioned. The paper includes eight photographs.

ACCIDENTS, GENERALLY

See Abstract No. 1316

ACCIDENTS IN GAS AND DRUG ADMINISTRATION

1339. WEISS, W. H. **Gas cylinder safety.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 91-93.

Cylinder gases play an important role in hospitals and in all cases the need for proper identification, handling and safety measures is essential. The success of medical

treatment may depend on the purity of the gas as well as on the way the cylinders are treated. Safety measures are outlined under the headings of: (i) handling of cylinders; (ii) cylinder identification; (iii) use of the pin-index system to prevent interchangeability of flush-type valve cylinders; and (iv) the diameter-index system for non-interchangeable connections of medical gas cylinders where removable, exposed threaded connections are used. The necessity for safety measures for all involved in using cylinders should be stressed.

THE PATIENT

WELFARE OF THE PATIENT

See also Abstract Nos. 1266, 1360, 1361, 1378

1340. GREAT BRITAIN. CENTRAL HEALTH SERVICES COUNCIL. **The organisation of the in-patients day: report of a committee. (Chairman: Sir John Hanbury).** London, H.M.S.O., 1976, viii, 103pp. £1.35

This committee was appointed to consider and advise on the principles which should govern the organization of the in-patient's day in hospitals, other than psychiatric hospitals, having regard to the medical and social needs of the patients and the efficient organization of the work of doctors and nurses. An introduction outlines developments since the previous report on the subject [see *Hospital Abstracts*, Vol. 1, Abstract 1062] and the changing situation in hospitals. There are chapters, with recommendations on: the general concept of in-patient care; acute medicine and surgery; maternity patients; children in hospital; the care of the elderly in-patient and the longer-stay patient; the care of the dying patient; admission and discharge procedures; spiritual needs, community support and voluntary services; visiting; amenities and recreation; avoidable nuisances; problems of communication; medical staff practice and organization; nursing staff practice and organization; paramedical and other professional staff practice; and catering and housekeeping services.

VOLUNTARY SERVICE, VOLUNTARY WORKERS

See Abstract No. 1366

HOSPITAL SOCIAL WORK

See also Abstract No. 1372

1341. MENDOZA-SARMIENTO, J. and others. **Medical social work in the 'Centro Nacional de Paraplejicos', Toledo, Spain.** *Paraplegia*, Edinburgh, 1976, May, vol. 14, no. 1, pp. 71-73.

The medical social work service of the Centro Nacional de Paraplejicos, Toledo, is described. The centre was inaugurated in 1974 and by 30 April 1975 141 patients had been treated in the hospital. The work of the medical social worker is outlined. The

main social problems are housing, jobs, pensions and families; the service makes use of all available resources to solve these problems.

THE GENERAL PRACTITIONER AND HIS PATIENTS

See Abstract Nos. 1225, 1363

1342. METCALFE, D. **Problem orientated medical records in general practice, a practical programme. 9. Hospital communications.** *Update*, London, 1976, May 15, vol. 12, no. 10, pp. 1146, 1148, 1150, 1153, 1154.

Problem-oriented medical records are ideal for use in communicating between doctors in general practices and hospitals. The records have three components: background information, clinical or progress notes and a problem list. The function of the general practitioner with regard to patients seen by hospital doctors is to: (i) institute (or continue) and supervise the treatment; (ii) make sure the patient understands the nature of the problem and how to deal with it; and (iii) explain the situation to the patient's family. A problem-oriented format for a discharge letter would indicate how the problems were first found, the problems still present, and possible plans for the future. Suggestions for methods of changing to problem-oriented letters are outlined, together with examples of letters used at the Gardiner Institute, Glasgow. The advantages of the method lie in the ease with which retrieval and use of the information can be enhanced by flow graphs and drug sheets.

1343. BERKELEY, J. S. **Reasons for referral to hospital.** *Journal of the Royal College of General Practitioners*, Edinburgh, 1976, April, vol. 26, no. 165, pp. 293-296.

The purpose of this study, which involved 20 general practitioners with a total of 34,000 patients, was to compare the use made of hospital beds in north-east Scotland during a period of one year by a population with access to cottage and general hospital beds and by a matching population with access only to general medical hospital beds. It was subsequently found that: (i) the availability of a hospital bed is often the controlling factor in the admission of a patient to hospital rather than the general practitioner's 'choice'; (ii) general practitioners with access to cottage hospital beds would choose to treat over one quarter of their own patients; (iii) acute onset of illness was more characteristic of patients admitted to a general hospital—the reason for referral being predominantly for investigation and special treatment; (iv) in over half the patients admitted to a cottage hospital the reason for referral was mainly the need for nursing care; (v) patients in a cottage hospital seem to suffer mainly from circulatory or respiratory disease; and (vi) where the doctor is confident of his diagnosis patients are usually sent to cottage hospitals.

HOSPITAL CARE

See Abstract Nos. 1277, 1282, 1307, 1356, 1364, 1365, 1373, 1374

HOME CARE, AFTER-CARE

See Abstract Nos. 1375, 1376, 1379

SPECIAL DEPARTMENTS

OPERATING SUITES

See Abstract Nos. 1250, 1361

PHARMACY

See also Abstract No. 1285

1344. FELIS, W. Rentiert sich eine Krankenhaus-Apotheke? Ein Erfahrungsbericht. **[Does a hospital pharmacy pay? Report on an experience.]** *Krankenhaus*, Stuttgart, 1976, June, vol. 68, no. 6, pp. 209-212.

When in 1972 the 650-bed hospital at Heidenheim (Baden-Württemberg) lost the service of its pharmacist its pharmacy was demoted to being a 'dispensarium' (a drug distribution centre run by a non-pharmacist). Drug costs rose by 40 per cent: the cost per patient day increased by DM4 and annual drug costs by DM625,600. Two pharmacists were appointed in 1973, the steep increase in drug costs levelled out and it is estimated that by 1975 the annual saving on drugs was one million DM. The advantages of the hospital having its own pharmacy and pharmacists include the following: drugs are bought direct from the manufacturer at more favourable prices; the pharmacist acts as professional adviser to doctors and nurses; and a closer watch can be kept on the selection of drugs to be bought. Examples are given of how savings on drugs are made at the Heidenheim hospital. It is suggested that a pharmacy is worthwhile in hospitals with 300 or more beds: for smaller hospitals a local pharmacist could be appointed as adviser. It should also be possible for hospitals with a pharmacy to serve smaller hospitals in its locality.

1345. TANNER, D. J. **Comprehensive pharmacy services in an 85-bed hospital.** *American Journal of Hospital Pharmacy*, Washington, 1976, April, vol. 33, no. 4, pp. 340-349.

Prior to January 1975 Caldwell County War Memorial Hospital, Princeton, Ky., had a drug room operated by one full-time clerk and a consultant pharmacist who attended for about 1½ hours daily. This paper describes the development and operation of a full-time pharmacy service providing a unit dose drug distribution system, a centralized intravenous admixture programme and clinical pharmacy services. The importance of relating the new programme to available finances is stressed. Other key factors include: (i) the extent of the management and clinical expertise of the director of the pharmacy; (ii) the degree of professional acceptance and functional latitude afforded to the pharmacist by the medical staff; (iii) nursing acceptance of the pharmacist's expertise in patient care and time spent in implementation of the programme; and (iv) the progressiveness of the hospital administrator's attitude towards the pharmacy services and confidence in the director's proven ability. Quality assurance programmes are essential in pharmacies of hospitals of every size to provide adequate services to patients.

1346. LIPMAN, A. G. and BAUER, E. P. **Pharmaceutical group purchasing cuts costs, expands knowledge.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 99, 101-104.

The Connecticut Hospital Association (CHA) has expanded its group purchasing to include food, dietary supplies, clinical and X-ray supplies, fuel oil and medical-surgical supplies. Pharmaceutical and intravenous solutions and administration sets have recently been included. Guidelines for purchasing were developed to improve drug quality and provide economic advantages to the hospitals. The success of the CHA and the Connecticut Society of Hospital Pharmacists schemes is dependent upon the active participation of each institution within the system. The pharmacist advisory committee selects potential drugs from several drug lists. Potential suppliers have to submit information on quality control and bio-availability and are selected on the basis of quality, acceptability of product and service record. An invitation to tender is sent to the selected manufacturers, including a list of those hospitals committed for the contract period and the total price and amount of the selected drug used in the previous year. The group purchasing scheme allows hospitals to achieve savings in costs, and since each tender invitation includes information on the previous year's purchases by the hospitals response from the pharmaceutical industry has been good. The scheme is self-supporting, consequently the larger hospitals which would often be able to obtain good prices independently are not obliged to support the scheme. Hospitals have achieved significant benefits in cost savings and shared drug information as a result of the scheme.

1347. KLOTZ, R. and STEFFENS, S. **Improved pharmacy services through pharmacist participation in medical rounds.** *American Journal of Hospital Pharmacy*, Washington, 1976, April, vol. 33, no. 4, pp. 349-351.

The pharmacy programme of the 250-bed Children's Memorial Hospital, Chicago, includes a centralized unit dose drug distribution system and an intravenous admixture programme for all patients. Services are operational 24 hours a day, with 9.5 full-time equivalent pharmacists, 7.5 full-time equivalent technicians and two clerical staff. All patient profiles are prepared manually. A trial redistribution of responsibilities enabled each pharmacist to participate in medical or nursing work rounds and to collect clinical data. Beneficial results of the trial included: (i) a reduction in the amount of medication wasted due to late order changes; (ii) increased clinical expertise gained by the pharmacists, enabling them to make more informed recommendations to the medical staff; and (iii) updating of the pharmacists' knowledge of patients' conditions and continuing in-service training for nursing staff in noting and reporting to doctors or pharmacists on possible drug side effects.

1348. SCHNELL, B. R. and others. **The design and implementation of a unit-dose system.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, 1976, March/April, vol. 29, no. 2, pp. 53-55.

Four major areas of concern to be considered when establishing a unit dose system are examined: groundwork, planning, orientation, and implementation and evaluation. The groundwork needs: (i) a review of the literature; (ii) definition of goals; and (iii) stimulation of interest. For successful planning a steering committee must be

formed to design a system within the financial constraints, to compare it with the traditional methods and to draw up new forms. A pilot study in a selected ward should be inaugurated together with procedure manuals for the nursing and pharmacy departments. All pharmacy staff should spend up to a week on the pilot ward. The pharmacy department should conduct several trial runs. All staff should be aware of the developments in the system and should be involved as soon as possible. The implementation and evaluation of the pilot study findings should result in the expansion of the system to the rest of the hospital. The same attention should be paid to orientation sessions for the rest of the hospital as was given to the pilot study ward. Responsibility for training new nursing staff should be partly that of the pharmacist who also trains new pharmacy staff and updates the procedure manuals, allowing consistency in procedures for maintaining the system.

LABORATORIES

1349. TRINKLER, H. Die Laboristin: was sie ist und was sie nicht ist. **[The laboratory assistant: what she is and what she is not.]** *Veska*, Aarau, 1976, May, vol. 40, no. 5, pp. 243-245.

Since 1970 the laboratory training school at the Basel Cantonal Hospitalhas, in addition to its three-year course for laboratory technicians, been running a course for laboratory assistants. This lasts 1½ years (three months' theory, 14 months' practical work, and one month for final revision and examination). Laboratory assistants specialize in one only of four subjects: haematology, clinical chemistry, general laboratory work, or histology. They work mainly in large laboratories where they relieve laboratory technicians of the more simple and routine procedures: there would normally be two assistants working to 10 technicians. So far about 60 laboratory assistants have been trained for work in Swiss hospitals. The passing of the laboratory assistant examination qualifies for entry to the course for laboratory technicians.

1350. ANDERSON, D. L. **Public sector output measurement problems: the case of the hospital clinical laboratory.** *Inquiry*, Chicago, 1976, March, vol. 13, no. 1, pp. 71-79.

An evaluation of the current system for reporting hospital clinical laboratory output in Canada is described. Twenty Saskatchewan clinical laboratories were assessed using cross-sectional information. Two problems were encountered: (i) what test results should be defined as final output; and (ii) how tests should be aggregated. The evidence indicates that the choice of a final physical output measure and an aggregation scheme is important because conflicting information is generated by alternative schemes. The present aggregation scheme (the Statistics Canada unit) under-estimates the existence of scale economies. The basic limitation is not its time-based parameters, but the use of machine-dependent weights, resulting in an understatement of activity for those laboratories with automated equipment. Evidence from the aggregation scheme, the Connecticut Relative Unit Value scheme and the commercial fee scheme is evaluated; it is suggested that public policy information would be improved by assigning manual weights of the Statistics Canada unit to all tests regardless of the equipment used.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract No. 1238

1351. SELTZER, R. A. **The impact of computerized radiological reporting systems on the radiologist.** *Radiology*, Easton, Pa., 1976, March, vol. 118, no. 3, pp. 737-739.

The uses of computers in diagnostic radiology include case retrieval, compilation of statistics, patient scheduling, diagnoses, and formulation of radiology reports. The advantages and disadvantages of automated radiological reporting are discussed. Radiologists are often slow to accept the systems, since they must alter their reporting style from 'dictating while reading' to 'reporting' only after searching the films and drawing a conclusion. The learning period for the system varies from weeks to months for each radiologist. The reporting time is slightly increased, but the advantages outweight the disadvantages. The presentation of a summary of findings instead of a lengthy discourse to the physician by the radiologist maximizes his influence on patient care and is less time consuming for the physician.

1352. WHEELER, P. S., SIMBORG, D. W. and GITLIN, J. N. **The Johns Hopkins radiology reporting system.** *Radiology*, Easton, Pa., 1976, May, vol. 119, no. 2, pp. 315-319.

A comprehensive, automated, diagnostic radiography reporting system has largely replaced conventional dictation and transcription at the Johns Hopkins Hospital, Baltimore, Md. Radiologists report diagnostic interpretations by probing terms on a visual display terminal linked to a computer. The information appears on a cathode ray tube for confirmation, followed by printout, report dispersal and storage. This is the main method of radiography reporting. The current system can be supported by a large computer or a dedicated minicomputer. The reporting process, reporting terminal and digital logic used for the system are outlined, together with the costs, storage, retrieval and transmission and the merits of concise versus traditional descriptive reports. The known disadvantages are: (i) radiologists have to learn a new technique; (ii) reporting complex cases is slower than dictation; (iii) the number of radiologists reporting is limited by the number of terminals; (iv) it is not cost-effective to install a terminal in low-volume areas; and (v) computer and terminal breakdowns average 2.1 hours per week out of a 24-hour, seven-day week. Support systems include information storage and retrieval, statistics and billing. A commercial version will soon be available.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract No. 1239 (Haemodialysis)

1353. Nieuw centrum in Knokke-Heist; Belgisch Instituut voor Thalassotherapie kan per dag 400 patiënten behandelen. **[A new centre in Knokke-Heist; the Belgian Institute for Thalassotherapy can treat 400 patients a day.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1976, June 8, vol. 45, no. 1103, pp. 339, 341.

This new centre provides treatment, frequently for rheumatic diseases, based on the use of sea water and air and consisting of hydrotherapy alternated with massage and

physiotherapy. Hydrotherapy facilities consist of various types of baths, showers and swimming pools with sea water at 33°C. A total of 55 staff provide treatment for 400 patients a day: there is no in-patient accommodation. Other facilities include saunas, physiotherapy and massage rooms, solarium, X-ray unit, laboratory and cafeteria. Twelve pumps with a total capacity of 400 cu. m. per hour pump sea water into the centre's own 350 cu. m. reservoir. Cost per patient day is 850 to 950 Belgian francs (£12 to £13). Six photographs are included.

1354. PEARSON, D. A., STRANOVA, T. J. and THOMPSON, J. D. **Patient and program costs associated with chronic hemodialysis care.** *Inquiry*, Chicago, 1976, March, vol. 13, no. 1, pp. 23-28.

The economic aspects of haemodialysis care are studied. The objectives are: (i) to estimate annual patient costs for home dialysis and day centre dialysis; (ii) to analyse the costs of schemes providing day centre haemodialysis care; and (iii) to assess the implications of recent legislation on renal dialysis services. The results indicated that except in three relatively large institutions none of the schemes produced enough revenue to meet costs. There is a trend towards a reduction of losses from the second year of operating the scheme. The new legislation will provide economic relief to many institutions which have experienced considerable losses in the initial development of the haemodialysis schemes. Management of the schemes could be improved by establishing uniform standards of cost accounting. The law is an advance towards lessening the hardships of the disease, but whether it will improve the quality and effectiveness of haemodialysis remains to be seen.

INTENSIVE CARE UNITS

See Abstract No. 1329

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1376

1355. MACSTRAVIC, R. E. **Hospital-based ambulatory care—the wave of the future?** *Hospital & Health Services Administration*, Chicago, 1976, vol. 21, no. 1, pp. 60-66.

Primary care has become increasingly important and many hospitals in the United States have developed their own primary care schemes. Two types of schemes have been set up; on-site centres, and satellite centres. Frequently the on-site centre is an extension of the hospital, to relieve and prevent inappropriate use of emergency rooms. Such clinics are the result of the hospital adjusting to the increased demand which has built up in the absence of any alternatives. Satellite centres tap a new source of demand and are sited in rural areas and in more inaccessible areas of cities. The advantages of the hospital operated primary care clinic are: (i) comprehensive services offered with hospital back-up; (ii) hospital and clinic can share the same medical records; (iii) hospital staff can gain experience of family-orientated health care; (iv) the urban

community gains access to more sources of health care, whilst many rural communities now have a source of care where none previously existed; and (v) hospitals can expand their services to meet the demand. It is concluded that hospital primary care centres will become more common and such schemes offer benefits to both the hospital and the community. However, in addition to benefits there are potential problems for both the hospitals and the centres. To avoid such problems it might be advisable if satellite schemes developed out of organized, co-operative planning by the community and health care providers.

CASUALTY AND ACCIDENT

1356. SHAPIRO, L. B. and OSTROVSKII, I. A., editors. **Organization of emergency medical care.** Baltimore, Johns Hopkins University Press, 1975, x, 165pp. £8.25

This volume, translated from the original Russian edition published in 1969, first outlines the organization of emergency care in the USSR and other countries. It then gives a detailed account of services in the USSR, with particular reference to Moscow. There are chapters on: specialized emergency care; operation of medical emergency stations in cities; organization of emergency medical measures for traumatic injuries; emergency treatment of cardiovascular diseases; special emergency care and early hospital admission in acute cerebrovascular disorders; emergency care in acute poisoning; and scope of work of a medical emergency station.

DAY HOSPITALS

See Abstract No. 1376

CHILDREN

See Abstract Nos. 1326, 1379

GERIATRICS AND LONG-STAY

See also Abstract Nos. 1252, 1319, 1377

1357. LEONARD, J. C. **Can geriatrics survive?** *British Medical Journal*, London, 1976, May 29, vol. i, pp. 1335, 1336.

Geriatrics has consistently failed to attract enough staff since few doctors want to confine their attention solely to elderly patients. Consequently geriatric units frequently cannot provide a full medical service for the elderly. Beds in acute medical wards may be blocked by geriatric patients. The division between geriatric and medical units is arbitrary since there are no techniques unique to geriatrics. The separation between the two specialties may have developed more for administrative and political reasons than for clinical ones. Geriatrics should be reintegrated into general medicine and abolished as a separate specialty, then the problem of junior medical staffing would be solved.

1358. SOMERS, A. R. **Geriatric care in the United Kingdom: an American perspective.** *Annals of Internal Medicine*, Philadelphia, 1976, April, vol. 84, no. 4, pp. 466-476.

Geriatric care in the United Kingdom, with 13.6 per cent of its population over 65 years of age, seems to be a more challenging aspect of health care than in the United States with 10.1 per cent. The major characteristics of the British system considered in this paper are: (i) financing through the National Health Service; (ii) involvement of general practice; (iii) geriatrics as a medical specialty; (iv) institutional care and absence of 'nursing homes'; (v) home care; and (vi) aims and objectives. Various achievements are discussed; these include the efforts made to maximize efficiency in a high demand, comparatively low-resource context, co-ordination of health and social services together with the adequacy of institutional facilities. A list of 61 references to the literature is included.

1359. BEVILACQUA, C. Il dipartimento dell'anziano. **[The geriatric department.]** *Ospedale*, Torino, 1976, May, vol. 29, no. 5, pp. 131-141.

Although the term 'department' was used in an Italian decree in 1969 to describe a particular type of hospital structure which would re-group divisions, sections, and units for reasons of efficiency, little has yet been done to introduce this structure. The author compares the official proposals with those put forward in 1974 by the National Agreement on Work for Hospital Staff. He then describes the geriatric department in Trieste. This department comprises three geriatric divisions, three long-stay divisions, rehabilitation, radiology, psychology, and psycho-geriatric services, laboratory and social services, and a day hospital. Attempts are being made to replace a heirarchical structure by team work and participation.

NEUROLOGY AND NEUROSURGERY

See Abstract No. 1341

CARDIOLOGY

1360. GOMPH, B. **Helping them back to a normal lifestyle: a practical and effective coronary teaching and rehabilitation program.** *Hospital Administration in Canada*, Don Mills, Ont., 1976, April, vol. 18, no. 4, pp. 39-43.

Etobicoke General Hospital, Toronto, has developed an active Cardiac Rehabilitation Centre for patients who have had a coronary thrombosis. The centre aims to educate the patient and his family, whilst rehabilitating and treating him. Teaching begins after three days of hospital care. The teaching programme is specifically planned to meet the individual needs of the coronary patient, and instils the knowledge that heart disease can be prevented if precautions are taken. Details of the teaching material are given. The behavioural responses following a myocardial infarction are: (i) anxiety; (ii) denial; (iii) depression; (iv) sexual aggression; and (v) realistic acceptance. Details of care for each stage of response are outlined. Family involvement is important and family discussions should be encouraged. This teaching programme is showing the way for all hospitals interested in total patient care for coronary patients.

UROLOGY

See Abstract Nos. 1239, 1354

SURGERY

See also Abstract No. 1315

1361. KAPSAR, P. P. **The preoperative visit—O.R. nurses and patients interact.** *Hospitals*, Chicago, 1976, April 16, vol. 50, no. 8, pp. 87-88.

St. Joseph Hospital, Kirkwood, Mo., has developed a pre-operative nursing team consisting of two nurses from the surgical team who collect information about the health of each patient and his psychological and sociological needs; together with the ward nurse they also plan the care of the patient during and after surgical intervention. The visit is made to the patient soon after he has been admitted and after his patient's chart has been completed. The procedures for maintaining full nursing care are outlined on the patient chart; the nursing care plan accompanies the patient throughout all stages of surgery. To complete the nursing care plan, members of the pre-operative visiting team make post-operative visits to evaluate the results of their nursing activities. The system has helped the surgical nurses realize that they can play an integral part in the overall nursing process for those patients requiring surgical intervention.

MATERNITY

See also Abstract Nos. 1273, 1283, 1329

1362. MILLIKEN, R. A., LESZKIEWICZ, J. and MILLIKEN, G. M. **Obstetrics facilities, theoretic model in New York City borough.** *New York State Medical Journal*, Lake Success, N.Y., 1975, Oct., vol. 75, no. 12, pp. 2254-2257.

A theoretic model is proposed for the reallocation of maternity facilities in one county of Greater New York City that will more closely approximate the demand for the services. The methodology is outlined. The implementation of the plan would require no investment in bed construction or conversion from other services. Facilities with the most obsolete equipment would be considered for the discontinuation of maternity services. In-patient services would be continued at hospitals which maintain out-patient pre-natal facilities. Information was collected from all institutions, with the aim of closing physically older or small units which would be converted into nursing units which are in greater demand by the county's population. The model attempts to regionalize health services and to increase the occupancy rate as significantly as possible to spread the fixed costs of facilities and staffing, and avoid duplication of costs. Regional reorganization is also considered. The plan requires the closure of only four obstetric services out of 20, indicating the relatively small adjustments needed. The problems of implementing the scheme are outlined. All hospitals should consider regional plans as a rationalization of services both for the community and for the hospital.

1363. LITTLEPAGE, B. N. C. **General-practitioner maternity units.** *Journal of the Royal College of General Practitioners*, Edinburgh, 1976, April, vol. 26, no. 165, pp. 263-265.

A study of information available for monitoring care was carried out during 1974 in 46 general practitioner maternity units in the south-west of England, a region with one of the lowest perinatal mortality rates in the United Kingdom. It was found that: (i) the information obtained did not form an adequate basis for monitoring at area level; (ii) the marked use of general practice units was not accompanied by high perinatal rates; and (iii) transfer of babies to a consultant unit after the delivery is commoner than elsewhere in England and Wales.

1364. WINGATE, M. B. and others. **Obstetric care in a family health-oriented university associated neighborhood health center.** *Medical Care*, Philadelphia, 1976, April, vol. 14, no. 4, pp. 315-325.

A one-year pilot study began in 1968 in the Thomas Jefferson University Children and Youth Clinics, Philadelphia, to provide comprehensive health care for those under 19 years of age and to determine whether this care could be extended to cover whole families. A team, comprising a paediatrician, a nurse midwife, a social worker, a sociologist team manager, a part-time records and appointments secretary, a senior obstetric resident and obstetric and psychiatric consultants, ran the programme for 21 obstetric patients and their families. Interviewing and screening procedures and the roles of the team members are detailed. A management-education study team was also set up to study the completeness of the records made and to evaluate the study's educational content and cost. Fifteen patients had their antenatal care, delivery and post-partum care completely supervised under the programme. The nurse midwife was fully accepted by patients as the primary obstetric care professional. Some initial hostility was shown by other professionals to the system on grounds of complexity, time consumption and expense. Cost analysis indicated that the cost of providing a programme of high quality obstetric care to patients from a low socio-economic community compared favourably with that of providing such care to private patients.

GYNAECOLOGY

See Abstract No. 1273

OPHTHALMOLOGY

1365. TROBE, J. D. **Problems of eye care delivery.** *Survey of Ophthalmology*, Baltimore, Md., 1975, Nov./Dec., vol. 20, no. 3, pp. 205-212.

The development of ophthalmology as a sophisticated specialty over the past 50 years led to improved training schemes, increased output and growth of knowledge and and technology. In spite of the progress several problems are growing in the United States. There is a fall in the rate of disease per ophthalmologist, with a consequent decline in proficiency and the rivalry between ophthalmologists and optometrists is on

the increase. One solution to the problem may be found in a co-operative screening consultation team system, as the one currently being evaluated at the University of Florida.

PSYCHIATRY

See also Abstract No. 1240

1366. LIMBRICK, P., editor. **One-to-One: an experiment with community participation in long-stay hospitals.** London, Inter-Action Inprint, 1976, iv, 36pp. £0.60

The One-to-One project, the idea for which originated in the United States, aims to create individual and personal contact between a voluntary worker and a patient. It does this by holding one-to-one days in psychiatric hospitals and hospitals for the mentally handicapped. In 1976 the project is entering its third year and it is hoped that this handbook will provide information and encourage hospitals and their surrounding communities to try out the idea. There are papers on the One-to-One office, organizing a one-to-one day, outdoor activities for a one-to-one day, one-to-one in a psychiatric hospital, publicizing a one-to-one day, the volunteer in the medical handicap hospital, comments from participants, and a small-scale one-to-one project.

1367. WHITEHEAD, T. **A plan for psychiatric hospitals.** *Health and Social Service Journal*, London, 1976, May 29, vol. 86, no. 4492, p. 981.

There is a need for a new look at the provision of psychiatric services, unprejudiced by preconceived plans, partial developments and misunderstood expectations. In some areas it may be discovered that the psychiatric hospital could change its role completely and provide a small psychiatric unit plus medical, surgical and other specialist facilities; at least two psychiatric hospitals have already done this. Plans should also be made to provide in-patient and day patient facilities for the elderly mentally ill within the general hospital framework. Appropriate wards could be converted to hostels and self-contained flats to provide for patients who only need this type of accommodation. The rest of the hospital could then be divided into self-contained and semi-autonomous units based on future plans for moving these units into a general hospital framework.

1368. MOORE, J. and MOORE, G. **The role of a sick unit in a psychiatric hospital.** *Nursing Mirror*, Sutton, Surrey, 1976, May 20, vol. 142, no. 21, pp. 67-69.

This project, researched between March 1974 and February 1975, was carried out at the 486-bed Littlemore Hospital, near Oxford. Its aim was to ascertain the usefulness of a sick unit within a psychiatric hospital. The results can be summarized as: (i) manpower in other hospitals is saved and continuity of care is provided; (ii) psychiatric patients can be difficult to manage, and district general hospital wards are not necessarily equipped to do so; (iii) psychiatric nurses on other units are free to participate fully in their unit programmes; (iv) it eliminates the duplication of equipment in other units; (v) it ensures that the patient can be nursed free from noise created by disturbed patients; (vi) it provides a valuable training area for sick nursing; (vii) there is concentration of medical, nursing, and paramedical skills; and (viii) it provides for terminal illness in a more dignified manner and provides quieter surroundings for visitors and relatives.

1369. IRVINE, E. D. **Exe Vale Hospital 1948-1974: a record of the work of the Hospital Management Committee, staff and voluntary workers on behalf of the mentally sick in a large part of the County of Devon.** Exeter, Devon Area Health Authority, 1976, 106pp. £0.75

This report describes the changes in the services administered by Exe Vale Hospital Management Committee from the inception of the National Health Service in 1948 to its reorganization in 1974, and how and why they came about. After the background is set, there are chapters on: finance; the physical environment; developments in medical care; nursing; occupational and industrial therapy; social activity and voluntary services; the patient's day; catering; laundry; supplies, transport; security; and communications, trade unions. Photographs and statistical tables are included.

1370. HALLAM, R. S., MARKS, I. M. and PHILPOTT, R. **Behavioural nurse therapists?** *Nursing Times*, London, 1976, May 6, vol. 72, no. 18, occasional papers, pp. 67-68; May 13, vol. 72, no. 19, occasional papers, pp. 69-71.

The training programme in behaviour psychotherapy for six nurses pioneered by the Maudsley and Bethlem Hospitals and funded by the Department of Health and Social Security is described and evaluated. Two years' training in these hospitals was followed by one year's secondment to other psychiatric hospitals and a group general practice. Eighty-five per cent of the patients were treated as out-patients, in-patient work being carried out with those occupying 12 beds of a 36-bed ward in the Bethlem Hospital. Overall good results obtained by the nurses compared favourably with similar, earlier treatment by psychiatrists and psychologists, the secondment results suggesting beneficial nurse employment in patient assessment. Comparison of the expense and length of training required for nurses, psychiatrists and psychologists favoured the first. Widening interest in the programme was shown by other nurses, psychiatrists, social workers and occupational therapists and a massive demand followed for the placement of nurse therapists in many hospitals. The Joint Board of Clinical Nursing developed a syllabus for a Post-certificate Nursing Course in Behavioural Psychotherapy. Regularly reviewed country-wide training programmes and refresher courses every three years or so for trained staff are recommended. The future place of the nurse therapist in primary health care and hospital teams is discussed.

1371. MITCHELL, W. **Assessments in psychiatric nursing: communication and organisation.** *Nursing Times*, London, 1976, May 6, vol. 72, no. 18, pp. 709-710.

The experienced psychiatric nurse must combine the basic skills of the nurse with those of administrator, manager and educator to satisfy the demands made on her by both patients and staff. The assessment of registered nurses undertaking a 56-week psychiatric nursing training course at St. Luke's-Woodside Hospital, London, takes place after 38 weeks. Three attempts are allowed. The student takes the ward sister role for 10 weeks on a 12-week and six weeks on an eight-week allocation, the actual assessment preferably starting on the Monday after a week-end on duty. The ward sister acts as one of the assessors. The week-end ward report is discussed with nursing, medical and paramedical staff by the student, who then gives instructions to the ward nursing staff. The assessors question him/her on theoretical knowledge of the patients' disorders and the treatment and nursing care required, also observing his/her ability: (i) to communicate; (ii) to take positive action in an emergency; (iii) to teach new

student nurses; (iv) to relate to colleagues; (v) to deal with telephone enquiries; and (vi) to talk to patients' relatives and others. Should a wrong, possibly harmful decision be made, the assessment is stopped and the student will be referred for a further assessment. Real life situation assessments are considered to give a fairer picture of the student's ability. The assessment form is reproduced.

1372. LUSHER, A. E. **Mental health emergencies.** *Health and Social Service Journal*, London, 1976, May 29, vol. 86, no. 4492, p. 982.

A three-month survey involving social workers from the 11 district offices in Surrey, aimed at distinguishing between the influence on emergency admissions of external factors such as the involvement of general practitioners, psychiatrists, family, friends and neighbours, the time of day, and the social workers' role. No undue difficulties in contacting and involving general practitioners, psychiatrists and hospitals were indicated. Applications for referral were shown to be generally signed by the social workers. Of the 134 recorded requests to social workers, of which 45 were for conversions of Sections and 89 for admissions, 84 were dealt with by qualified staff with between one and 36 years' experience and 50 by unqualified staff with between one and 25 years. Experience did not seem to be a factor in time taken to arrange admission. The considerable flexibility required in dealing with the variety of factors involved in each referral indicated the need for training to enable social workers to identify symptoms of both mental and physical illness and to cope with anxious relatives and difficult situations and delays preceding hospital admission. Study courses and field participation are prerequisites to undertaking out-of-office hours 'on call' duties. A work load study showed an average staff age of 37 and an average staff experience of 7.3 years, a higher proportion than that of the rest of the country.

1373. VOINESKOS, G. **Locked wards in Canadian mental hospitals: the return to custodialism.** *Canadian Medical Association Journal*, Ottawa, 1976, April 17, vol. 114, no. 8, pp. 689-691, 694.

In 1975 a survey of 38 of the 44 Canadian public psychiatric hospitals revealed that more than one-third of the wards are locked 24 hours a day. Hospitals with fewer than 300 beds have a significantly smaller proportion of locked wards than those with more than 600 beds. The disadvantage of the locked ward lies in the custodial atmosphere, whilst disadvantages of the open ward are the inability to protect the community and the need for a higher staff to patient ratio. What is required to improve the situation is greater organization of patients into relevant activities, hospitals with fewer beds and greater tolerance on the part of the community. However, national organizations have no information on open and locked-ward systems and political pressures are directed at the hospitals to close the wards.

1374. TROJAN, A. and WALLER, H. Soziale Determinanten der Krankenhauseinweisung psychiatrischer Patienten—ein Vergleich zwischen Universitätsklinik und Landeskrankenhaus. **[Social determinants of hospital admission of psychiatric patients: a comparison between a university-based hospital and a state mental hospital.]** *Öffentliche Gesundheitswesen (Das)*, Stuttgart, 1976, April, vol. 38, no. 4, pp. 216-222; English summary p. 216.

A comparison is reported from Hamburg between 58 patients admitted to a state

psychiatric hospital and 57 admitted to the psychiatric department of a university hospital. It was found that those admitted to the state hospital were more likely to be older patients, manual workers, those diagnosed as schizophrenic, readmitted patients, and those admitted compulsorily. The possible reasons for this are discussed and include the following: members of the lower social classes are more seriously affected because of their living conditions; the under-privileged do not get psychiatric treatment until their illness is well advanced; and the high ratio of reactive diagnoses at the university hospital is partly explained by the acute care provided there. The following proposals are made for improving in-patient psychiatric care: improved conditions in state hospitals; more even distribution of facilities between state hospitals and university hospitals; and more psychiatric departments in the larger general hospitals.

1375. STEIN, L. I. and TEST, M. A. **Retraining hospital staff for work in a community program in Wisconsin.** *Hospital & Community Psychiatry*, Washington, 1976, April, vol. 27, no. 4, pp. 266-268.

As part of a community treatment scheme for psychiatric patients in Madison, Wis., staff from Mendota Mental Health Institute were retrained to help the patients acquire the skills necessary to adjust to community life. The training in community living scheme involved a two-month training period for staff with emphasis upon: developing guidelines for treatment, working with simulated problems and familiarization with community resources. The length of training enabled staff to build up sufficient self-confidence to move out from the training to the implementation of the scheme in the community. The scheme has proved itself to be clinically feasible and successful, although it requires much energy and enthusiasm from the staff. During the two years' operation of the scheme there has been almost no staff turnover. The continued enthusiasm of the staff is thought to be the result of experiencing problems of which they had no knowledge in hospital work.

1376. REIMER, F. Ambulante und teilstationäre Einrichtungen am psychiatrischen Krankenhaus. **[The extramural and semi-in-patient facilities of a psychiatric hospital.]** *Fortschritte der Medizin*, München, 1976, May 20, vol. 94, no. 15, pp. 855-856.

Weinsberg Psychiatric Hospital, near Heilbronn, which serves a population of one million, has 680 beds plus a number of other facilities which provide a total of 250 other beds or places. These include: a night hospital in the grounds of the main hospital; a therapeutic centre at Heilbronn which houses both a day hospital and a night hospital; two halfway homes near the hospital; protected housing; and three homes within the hospital area. These facilities fall far short of WHO recommendations which, for such a catchment area, require 500 acute beds, 1,000 day hospital and night hospital beds or places, and 3,500 beds or places for psycho-geriatric patients, drug addicts and young people. General practitioners and private specialists have made little use of the extramural facilities. Plans are afoot to improve the surveillance of discharged patients and to provide 25 additional home places.

1377. SAVAGE, B. J. and WRIGHT, A. L. **Shared care of the elderly.** *Health and Social Service Journal*, London, 1976, May 8, vol. 86, no. 4489, pp. 840-841.

Fulbourn Hospital, Cambridge, and Cambridgeshire Social Services Department have conducted an experiment in co-operation between two traditionally separated

professional disciplines. Staff from a psycho-geriatric ward and local authority social workers met and tested ways in which they could collaborate. Seven beds were 'given' to the social services department, and the social work staff selected clients for the beds. When a social worker felt that a client would benefit by psychiatric hospital admission he made a written assessment in liaison with the local doctor. A nurse from the ward visited the patient and completed the assessment schedule; further social work and/or nursing help could be given or the patient could be admitted to hospital. The social worker could keep in contact with the patient while working with the family to prepare them for the client's return home. Ward nursing staff were also able to advise on the value of having a social work assessment of a prospective patient. There has been an increasing awareness of the procedures that often precede the referral of a client for psycho-geriatric care. The experiment was confined to one ward and one social service division, but the model it provided enabled other wards in the psycho-geriatric service to become similarly linked with social services divisions.

1378. LAWLOR, T. and CURSLEY, V. F. **A pocket money scheme.** *Health and Social Service Journal*, London, 1976, May 29, vol. 86, no. 4492, pp. 983-984.

Many mentally handicapped patients at the Normansfield Hospital, Teddington, Middlesex, were found to be not receiving or receiving inadequate amounts of pocket or reward money. New rates of pay were introduced, also an experimental accounting system involving setting up a bank. To safeguard those patients unable to appreciate the significance of cash, all patients were divided into three categories: (i) those capable of understanding and spending money, to be paid in cash; (ii) those capable of spending but incapable of looking after it, to have cash looked after by the nurse on the ward until they wished to spend it; and (iii) those incapable of having or understanding money, to be given credit facilities in the hospital shop. Trial credit schemes, found unsatisfactory by patients, nurses and the volunteers running the shop, are described. A system using plastic token money in addition to cash and credit, initially opposed by the treasurer as incompatible with the area's accounting system but subsequently agreed subject to periodical checks by his auditors, has been found to be more economical, if only because loss of tokens is cheaper than loss of money. It is also more therapeutic as a relatively safe phase on the way to patient reliability in handling money. It also enables patients to save and purchase articles costing more than one week's allowance, a saving not possible under the credit system.

1379. TOWNSEND, P. W. and FLANAGAN, J. J. **Experimental preadmission program to encourage home care for severely and profoundly retarded children.** *American Journal of Mental Deficiency*, Albany, N.Y., 1976, March, vol. 80, no. 5, pp. 562-569.

An experimental pre-admission social service scheme was established at Central Wisconsin Colony and Training School, Madison, Wis., to help parents keep their severely and profoundly mentally handicapped children or under six years old at home, if they did not need hospital care. Children were randomly assigned to control and experimental groups. The results showed that counselling with the mother alone about alternatives tended to result in increased marital conflict as well as a decision to keep the child at home. Family counselling should be used with the aim of achieving consensus within the family. Instruction in child-training procedures tends to result in fewer cases of objectionable behaviour, as well as a desire to keep the child at home, particularly

in cases where parents were uncertain about their plans and hopes. Treatment did not significantly increase the use of local social services. Existing community services were very different from the ideal community services, and more appropriate services are needed to develop the concept of community care.

AUTHOR INDEX

Addington, W. W. 1307
Ainlay, G. 1265
Alegente, G. 1324
Amman, L. 1245
Anderson, D. L. 1350
Ashworth, P. 1275
Baarle, A. J. van 1246
Barnett, G. O. 1302
Barry, D. 1313
Bauer, E. P. 1346
Baulig, H.-G. 1330
Beer-Gabel, M. 1289
Bérard, L. 1319
Berkeley, J. S. 1225, 1343
Bevilacqua, C. 1359
Bion, G. 1257
Bischofberger, P. 1228
Boccadoro, S. 1331
Bohan, D. 1308
Boisgelot, L. 1251
Bolliger, R. 1274
Borotra, D. 1258
Bowie, J. 1302
Brandejs, J. F. 1304
Breslin, J. 1318
British Standards Institution 1247
Brown, M. 1286
Brunier, J. 1261
Chapuis, R. 1260
Charns, M. P. 1287
Clarke, M. 1280
Clement, J. M. 1259
Colombo, S. 1245
Craven, P. C. 1326
Cursley, V. F. 1378
Ducel, G. 1334
Edelmeyer, H. 1330
Epstein, J. D. 1313
Ewell, C. M. 1294
Felis, W. 1344
Finlayson, H. 1278
Flanagan, J. J. 1379
Flesher, D. L. 1314
Foster, M. 1337
Frenay, E. 1293
Garside, D. 1283
Gebhardt, M. 1301
Gephart, D. 1229
Gigli, S. C. 1233
Gitlin, J. N. 1352
Golaz, A. 1255
Gomph, B. 1360
Great Britain. Central Health Services Council 1340
Great Britain. Department of Health and Social Security 1235
Gullotti, A. 1234
Häfeli, M. 1295
Hale, F. A. 1229
Hallam, R. S. 1370
Hawkins, W. E. 1231
Heinhold, M. 1300
Heinzelmann, K. 1320
Heise, J.-G. 1250
Henne, W. 1237
Herrick, J. D. 1285
Heuschneider, R. 1279
High, H. M. 1312
Hofmann, M. 1271
Hudson, C. L. 1226
Institute of Health Service Administrators 1270
Irvine, E. D. 1369
Jacobs, A. R. 1229
Johnson, A. C. 1288
Johnson, C. V. 1282
Jones, D. T. 1230
Joseph, H. 1311
Kalthoff, J. L. 1322
Kansai Institute of Information Systems 1305
Kapsar, P. P. 1361
Keating, E. 1316
Klotz, R. 1347
Kowalski, J. 1335
Krebs, R. L. 1266
Laufman, H. 1315
Lawlor, T. 1378
Lenz, F. 1232
Leonard, J. C. 1357
Leroy, G. 1256
Leszkiewicz, J. 1362
Levinson, H. 1269
Limbrick, P. 1366
Lindberg, D. A. B. 1303
Lindsey, J. O. 1325
Lipman, A. G. 1346
Littlepage, B. N. C. 1363
Lorrang, F. 1290
Lucas, E. 1276
Lucasse, A. 1241
Lusher, A. E. 1372
Macstravic, R. E. 1355
Maki, D. G. 1328
Marks, I. M. 1370
Martin, J.-C. 1297
Martini, P. F. 1239
Meliconi, F. 1331
Mendoza-Sarmiento, J. 1341
Metcalfe, D. 1342
Milliken, G. M. 1362
Milliken, R. A. 1362
Minaire 1263
Mitchell, W. 1371
Monico, G. 1233
Monstadt, H. 1248
Moore, G. 1368
Moore, J. 1368
Morand, P. 1259
Morin, F. F. 1265
Mostler, D. 1284
New Zealand. Department of Health 1252
Noble, W. C. 1327
Ostrovskii, I. A. 1356
Otge, P. 1291
Patterson, D. 1298
Paya, G. 1243
Pearson, D. A. 1354
Peck, P. 1335
Philpott, R. 1370
Plummer, J. 1277
Polak, A. 1227
Pontanel, H. G. de 1319
Pottier, H. 1236
Raasch, F. O. 1268
Ranacher, G. 1284
Rapkin, R. H. 1329
Reimer, F. 1376
Rettig, R. 1292
Rice, P. A. 1326
Roach, A. A. 1307
Roehrich, B. 1241
Rotter, M. 1253
Ryan, M. J. 1336
Savage, B. J. 1377
Schnell, B. R. 1348
Schulz, R. 1288
Schuster, W. 1267
Seidlitz, P. R. 1316
Seltzer, R. A. 1351
Shapiro, L. B. 1356
Siler, W. 1303
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Story, L. F. 1254
Stranova, T. J. 1354
Tanner, D. J. 1345
Tarjan, G. 1296
Tayside Health Board 1309
Terrier, G. 1243
Test, M. A. 1375
Thompson, J. D. 1354

Timmermans, I. 1338
Tingey, S. 1282
Toulat, J. 1241, 1259
Tourgis, W. J. 1317
Townsend, P. W. 1379
Trefny, F. A. 1268
Trinkler, H. 1349
Trobe, J. D. 1365
Trojan, A. 1374
Valenti, A. 1244
Voineskos, G. 1373
Waller, H. 1374
Warenski, J. C. 1273
Weiss, W. H. 1339
Wells, J. G. 1326
Wenzel, R. P. 1323
Wheeler, P. S. 1352
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